

The once and future KING'S: Peter Aspdon looks at the merger of King's College with Queen Elizabeth and Chelsea colleges, which will create a 6,000-strong student body in central London (page 11)



Britain is the second biggest donor of aid to ZIMBABWE and education has been one of the main beneficiaries. In his second feature on the country, John O'Leary looks at Zimbabwean efforts to build up engineering education and to boost teacher training (page 12)

KEYWORDS: J. P. Stern reassesses Erich Auerbach's epochal study of realism, *Mimesis*, "the most important single work of literary criticism of the post-war period" (page 16)

AMERICAN SOCIOLOGY has been much concerned with the impact of Puritan dogma on attitudes to work and science. Rarely, though, has it seen itself as part of the tradition of Puritanism. David Martin reviews a new study which traces the theological roots of sociology (page 17)

Prime ministers, electoral change, Ireland, Latin America, Stalinism, representation, liberalism and conservatism, parliament and the state. Eight pages of **POLITICS BOOKS** (pages 21 to 28)

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Next Week

Maurice Cowling on H. G. Wells
Bernard Bergonzi on Edward Thomas
Risk, risk management and risk education

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Free speech on campus

Last week was good and bad for free speech on the campus. Good certainly at the Polytechnic of North London where Dr David Owen, the leader of the Social Democratic Party, was allowed to complete his half-hour speech and suffered nothing worse than sharp questioning. Bad arguably at the University of Bradford where Mr Harvey Proctor, the right-wing Conservative MP for Billerica, was told that the meeting at which he had hoped to speak in support of the controversial Bradford headteacher Mr Ray Honeyford would have to be cancelled for fear of disruption.

The issue of free speech on the campus is not going to go away. How could it in a society where the political politeness of former years has been worn away by an abrogation of civility that parades as "conviction politics", and in a higher education system that has been hurried and hurried into a much more direct engagement with the contemporary and practical world? If universities and polytechnics are expected to respond with swift sensitivity to every new demand of industrial society, it is hardly reasonable to expect them to remain insulated from the political spasms and fevers of that same society. So in an age that has abandoned consensus for confrontation, higher education cannot avoid entirely contamination by this intolerance, fear and insecurity.

Neither Sir Keith Joseph, the Secretary of State for Education and Science, nor the vice chancellors' committee seems prepared to accept this bleak truth. Sir Keith is greatly concerned - obsessed, some of his critics have alleged - with the threat to free speech on the campus. It is always high on his agenda when he meets the vice chancellors. Any whisper of an incident in which a politician has been prevented or dissuaded from speaking at a university or polytechnic provokes a swift inquiry from the Secretary of State's office. Sir Keith is plainly alarmed that standards of adversarial politeness which he remembers no longer prevail so reliably on the campus.

He and those who share his concern see phenomena like the forced cancellation of meetings and "no platform" policies for racists and fascists as an especially sinister growth, the rejection of critical reason within the very institutions devoted to this cause, a truly terrible *raffion des clercs*. They are reluctant to see the threat to free speech on the campus from the opposite perspective, as a mild infection which higher education has brought to its enveloping society that itself is suffering from a raging fever of intolerance. There is very much an intellectual's response that attaches an exaggerated importance to the power of ideas and neglects the brute power of political, social and economic circumstances.

At first sight, £660 million does not seem such a staggeringly amount for the Government to put forward as a provisional figure for next year's advanced further education pool. Allowing for technical adjustments, it represents an increase of 6 per cent on this year's quantum and is appreciably better than the £645 million budget forecast in January's expenditure White Paper.

It might not be enough to compensate for inflation, but what public enterprise can guarantee that? Certainly, other branches of local government will hardly expect it in these times of penalties and rate-capping. In any case, the Green Paper on higher education made no bones about the treatment public sector higher education could expect: there would have to be "continuing gains in efficiency" including a further tightening of staff/student ratios.

Yet there was no doubting the depth of feeling on the subject at the board of the National Advisory Body. There was a rare show of complete unanimity

Of course it is terrible that Cabinet ministers, and other speakers, find it difficult at times to secure a reasonable hearing on campuses. But it is more terrible that the Prime Minister has to travel by fast car with police escort or by helicopter. Less than 40 years ago Mr Attlee was able to drive his wife through the Lake District, stop for Sunday lunch at a Kendal hotel, and not be surprised when asked to move his car because it was blocking someone else's. Any threat to free speech on campus, far from being the intellectual centre of this web of public tension, is among its feeblest outer strands. Today's alienation and anxiety have been fed first by the unchallengeably massive power of the modern state, now by that state's present disarray, and always by the thoughtless arrogance of some politicians. They have got very little to do with cowardly or subversive teachers, in higher education or anywhere else.

In any case before sealing the indictment against universities and polytechnics for their occasional failure to uphold free speech in all its pristine absolutism, maybe the good old days of academic civility which are remembered to such sentimental advantage need to be critically re-examined. In the past universities were often acutely censorious of the views that were considered acceptable for campus consumption. Nor in a vigorous democracy is it necessarily worse to be abused and shouted down, or even jostled and hit by tomatoes than to enjoy the doubtful pleasure of polite conversation and reasonable debate with people who may be secret traitors.

Yet none of this excuses the lack of clear action by the vice chancellors. Their committee seems to hope that if they mumble and fudge for long enough the problem will go away, or Sir Keith will go away, or both will go away. The only collective guidance that is promised is a codification of existing university powers and practice, plus a few points for future discussion. No wonder the Secretary of State remains twitchy and unconvinced. Particular universities of course have been clearer and more courageous, but the general response to this issue of free speech has been confined to the myopic minimum.

Higher education does have a particular responsibility to uphold free speech and fair debate, not because the Government will reduce its income if it does not accept this responsibility but because its purposes can only thrive in a free and tolerant society. But that responsibility cannot be fully discharged by getting tough with students who try to suppress views they do not like. Necessary as such action certainly is on occasions it is never likely to be more than a side-show. University and polytechnic leaders

have to do much more. First, they must help to create the conditions for political pluralism among their students rather than simply grumble passively about unrepresentative cliques dominating students' unions. Far-left student organisations, some national student organisations, because they are sucked into power by a vacuum. When effectively challenged by mainstream decency their power is fragile. Yet many higher education leaders take only a voyeuristic interest in student politics, while the Secretary of State treats them as dangerous games that must not be encouraged.

Second, they need to recognize that the limits of free speech have to be defined, one does not need to be committed to a utilitarian calculus of competing freedoms to believe that such limits exist. Free speech is curbed by the criminal law, in the cases of official secrets or racial hatred; by the civil law in the case of defamation; and also by social custom. A university or polytechnic is fully entitled to curb free speech if its integrity is undermined or a breach of the peace threatened. And if its own staff and students are curbed in this way its guests and visitors can reasonably be expected to observe the same restraints. A university or polytechnic cannot be expected to provide an open house for the expression of all views regardless of the consequences for the institution. It is entitled to consider its own interests, as Bradford seems to have done in the case of Mr Proctor.

Here there seems to be some confusion. If a university's leaders are expected to uphold their authority on campus, and are accountable if there is disorder, then their authority extends to laying down rules of conduct that visitors as well as members must respect. If they have no right to insist on such conduct they have no special authority, and so cannot be fairly blamed. On some occasions speakers have ignored this implicit contract. They have refused to respect the ethos, if not the rules, of the institution but have insisted that they are entitled to its unconditional protection. A campus is not a private club but nor is it Speakers' Corner.

Third, higher education leaders, and the Secretary of State, need to recognize that free speech in this narrow sense of ensuring that unpopular speakers receive a fair hearing is part of a much broader freedom, academic, intellectual, political and civic. It cannot properly be regarded in isolation. The threats to that larger freedom come from many directions, several more menacing than chanting demonstrators or even tomato-burning hooligans. They at any rate can be seen and condemned; these graver threats may be unrecognized, systematic or even openly encouraged.

A drop in the pool

among the non civil servants, insisting that £660 million was both inadequate and inequitable compared with university funding. And, despite the political reality of the situation, the reaction was understandable.

For two years, the NAB has been bending over backwards to ensure continued access to higher education for the maximum number of students, while also responding to Government entreaties on the subject to science, the funding of research and the expansion of teacher training numbers. The result has been a widening gap in funding levels with the universities and a series of delegations to Sir Keith Joseph to underline the dangers of continued underfunding, on research, capital projects and teacher training, the NAB committees has accepted Sir Keith's rebuffs in the hope of jam tomorrow.

The new budget, assuming it is confirmed, makes it quite clear that no such rebuffs are to be allowed next year. Even the present level of activity

Laurie Taylor



UNIVERSITY NOTICES

ESSAY DEADLINES

At the recent meeting of the Departmental Board of Communication and Media Studies it was agreed that new procedures should be introduced to deal with those students who fail to meet the essay submission deadline. As from this academic year anyone who hands in a late essay will be penalized by having one page of their work ripped out and thrown away for every day of lateness (up to a maximum of 20 pages).

D. Quinlan, Departmental Academic Secretary, Film Society. Tonight - 25th October at 8-10 pm. AT NO CORRIDA (Empire of the Senses) Followed by A.G.N.

STAFF GRADUATE SEMINAR Tuesday 29th October. Professor Lapping will start this term's series of seminars with a short discussion paper entitled 'Why Does It Seem Almost Impossible To Get Anybody To Turn Out For A Staff-Graduate Seminar?' Everybody Welcome (sorry - no undergraduates).

THERESA M. SUCCUBUS ESSAY PRIZE Entries are invited for the above prize. Essays should be submitted to the Registrar by November 4th. The title this year is 'What I Spent My Summer Holiday' and as usual the successful candidate will receive a voucher exchangeable at the university bookshop for books to the value of £2.50.

From the Registrar REMOVAL OF NOTICES (SECOND NOTICE) (It has been brought to my attention that my recent notice concerning the unauthorized removal of official University Notices has been removed from a number of notice-boards. This, as the earlier notice said plain is a serious disciplinary offence, as, of course, is the removal of any notice reminding people of the consequences of the removal of such notices. I hope this is now clear. The Registrar, P.S. Please do not remove this notice.

From the Registrar THROWING VERY LARGE LUMPS OF MUD AT THE VICE-CHANCELLORS WINDOW It seems that a number of very large lumps of mud have recently been thrown at the Vice-Chancellor's window. Students are reminded that this is a disciplinary offence even more serious than removing notices from the notice-board.

CAR IN FOR SERVING Doctor Pierce-Muller's car has gone in for its 25,000 mile check-up and he will not therefore be able to take his first year class for the rest of this week.

The Times Higher Education Supplement

November 1, 1985 No 678 Price 65p



Maurice Cowling on the politics of H. G. Wells, 15

Beesley urges 'scrutiny'

by Peter Aspdon

Universities can greatly benefit from the sense of urgency and radical questioning provided by the "scrutiny technique", claims the head of the Prime Minister's efficiency unit, Mr Ian Beesley.

The technique, which has been primarily used to improve efficiency in Government departments, is said to have saved £750 million of Government money since 1979 by identifying savings and improving performance. The scrutiny technique is built on the belief and principle that lasting reform comes best from within an institution, and that is applicable to most operations; Mr Beesley told *The Times*.

He said that the efficiency unit was intended to provide an outside stimulus for reform, by helping to ask radical questions and by injecting tensions into performance reviews. "But universities can to a large extent do that for themselves," he said.

Although universities were geared to a consensual method of decision-making, it needed individuals to accept the responsibility of asking the right questions to achieve greater efficiency, making a diagnosis and prescribing solutions. "You never get that from a committee - committees tend to settle for a quiet life. Once you face up to the difficult questions, you can make decisions on a more rational basis," Mr Beesley said.

Mr Beesley made his remarks following the publication yesterday of the unit's report on the implementation of government efficiency scrutinies, which seeks to improve departments' value-for-money performance.

He was a member of the Jarrett committee which reported in April on efficiency in universities, and is also a member of the National Advisory Body inquiry into good management practices and the Croham committee appointed to look at the University Grants Committee.

ESRC cracks down on PhD rates

by Jon Turney
Science Correspondent

A blacklist of institutions ineligible for research studentships is published today by the Economic and Social Research Council.

This unprecedented move is the final sanction in the council's campaign to force an increase in PhD submission rates, and comes after strong pressure during the summer from the Advisory Board for the Research Councils.

Fourteen institutions, including eight universities, whose latest four-year submission rates for social science PhD awards made in 1979 and 1980 are below 10 per cent, will be debarred from receiving ESRC research studentships in 1986 and 1987.

Next year the council will raise the cut off to 25 per cent, which, on current figures, will bring the bar down on a further 20 institutions.

No one who is awarded an ESRC studentship in the next two years will be allowed to use their award at the following institutions: the universities

of East Anglia, Liverpool, Aston, Dundee, or Queen's, Belfast; Leeds or Sheffield Polytechnics; University College London, the London Institute of Education and Kings College London; The University of Manchester Institute of Science and Technology or Manchester Business School; the University College of Wales at Swansea and Paisley College of Technology.

Between them, the 14 received over 120 PhD studentships in 1979 and 1980 and include some of the main social science research training centres. University College London and Liverpool University, for example, both had over 20 PhD starts in these two years, but have so far recorded only one submission apiece.

The council says all its figures have been double-checked with the institutions, and there will be no right of appeal. However, the ban will not apply to taught postgraduate courses, which is good news for Manchester Business School - one of the institutions running the ESRC's new taught doctoral programme.

The Advisory Board for the Research Councils, which advises the Department of Education and Science on division of research funds between the five research councils, has been keeping a close watch on thesis submission rates since the publication of the report on postgraduate education in 1982 from a working party chaired by Sir Peter Swinnerton-Dyer, now chairman of the University Grants Committee.

The ESRC has come under particular scrutiny as submission rates in the social sciences are typically around 25 per cent. Sir Peter proposed a range of sanctions to force institutions to do better, leading up to withholding quota awards, which the group hoped "would never prove necessary".

However, there has been no real improvement in submission rates, and ESRC sources say the advisory board threatened to remove at least £1 million from the council's 1986/87 budget unless it took drastic steps to reinforce its stance on submissions.

One of the sanctions proposed by Sir Peter was action against whole universities to mobilize opinion within the institution against the offending departments, and this is the course chosen by the ESRC.

No other research council has yet taken this step, although the Science and Engineering Research Council reminded vice chancellors last year that submission rates are taken into account in allocation of quota awards.

The SERC, like the ESRC, now publishes league tables of submission rates. Ironically, only one institution on the latest SERC list, Stirling University, matches the submission rates set by the top ESRC candidate, Henley Management College at 80 per cent.

The council's decision will re-open the debate about the organization of research training in the social sciences, discussed at length in the Swinnerton-Dyer report and in Lord Rothschild's 1982 inquiry into the then Social Science Research Council. Some of the money saved by reducing the number of awards for "traditional"

continued on page 3

Buckingham offers degree to PM

by Paul Flather

The Independent University of Buckingham, founded 12 years ago with the backing of right-wing academics and senior Conservative Party members, has offered the Prime Minister an honorary degree.

Downing Street confirmed this week that Mrs Thatcher had received a letter from Dr Michael Barrett, the vice chancellor of Buckingham, making the offer. At that time no reply and no decision to accept had yet been made. The offer comes nine months after Mrs Thatcher and Sir Keith Joseph, Secretary of State for Education and Science, and two years ago they intervened to ensure that Buckingham was granted its own royal charter.

Dr Barrett this week declined to discuss what he said was "confidential business" of the senate. He said any such proposal had first to go to the relevant committees, and that Lord Hailsham, the university's chancellor, also needed to be consulted. The matter was raised at a senate meeting two weeks ago though it did not appear on the formal agenda papers. According to reports there were five speakers in favour and two against, and the decision was approved without a vote. The offer is likely to be interpreted as a quid pro quo for the Prime Minister's past support. Only last summer she wrote to the Buckingham students union declining to attend a function but stressing again how keen she was on the university.

It also emerged this week that a proposal to offer Mrs Thatcher an honorary degree was first raised at Buckingham just after the Oxford vote but was dropped after Dr Barrett realized there was opposition to the move. Senate at that stage resolved to reconsider the matter at a later date.

THES columnist

The historian, Richard Cobb, joins *The Times* as a regular columnist this week. His first contribution, on teaching English to foreigners during the war, appears on page 16.

Back to the blackboard: Professor Harry Hanham, vice chancellor of Lancaster University, explains to a special meeting of the senate how the proposed new funding policy for universities will work. For those not in the know A (total grant to be distributed) equals T (tuition fees) plus G (Government grant) plus S (externally sponsored programmes) plus I (investment income) plus GI (gift income) plus R (related income, ie conferences). In the second formula A (total grant) equals T (resources to be distributed on teaching-based criteria) plus R (resources to be distributed on research-based criteria) plus S (identifiable special factors).

British Academy calls for fellowship scheme

by Ngaio Creguer

The British Academy has asked Sir Keith Joseph, Secretary of State for Education and Science, if he will fund a new scheme to recruit outstanding scholars in the humanities.

Sir Randolph Quirk, president of the British Academy, the learned society for the humanities and social sciences, has proposed to Sir Keith a scheme of post-doctoral fellowships. He has consulted the chairmen of

the Committee of Vice Chancellors and Principals, the University Grants Committee and the National Advisory Body, all of whom are backing his proposal.

Under the scheme, some 15 outstanding scholars, aged under 30, would be appointed in each of the five years from 1986/87 to 1991/92.

The candidates would have already completed their postgraduate research degrees and the fellowships would enable them to develop their research

for three years. They would then be likely to work in higher education.

The academy would use the fellowships to maintain scholarship in the major disciplines. The cost would be about £100,000 in the first year, rising to £670,000 in the fifth year.

The fellowships would be similar to the University Research Fellowships instituted by the Royal Society in 1983 for bright young scientists. This has so far provided 50 untenured research posts.

Ball unveils plan to boost engineering graduates

by Carolyn Dempster

A nine-point plan to solve the critical under-supply of engineering graduates was unveiled this week by Mr Christopher Ball, chairman of the National Advisory Body board.

He told a conference on "Engineering education in the polytechnics" at the Polytechnic of Central London that, first, the planning of higher education should be integrated into a single system. Second, there should be a long-term plan for the increased number of

engineering placed in universities and polytechnics over a number of decades.

The inability of institutions to recruit sufficient students to fill the engineering places targeted by the NAB last September was evidence that more needed to be done to encourage an increase in intake and it was not going to be achieved through a crash programme, Mr Ball said.

More rapid provision should be made for substantial number of postgraduate for substantial number of postgraduate for substantial number of postgraduate

much sterner efforts should be initiated to reduce the high drop-out rate of 16-year-olds.

Early subject specialization in schools was a problem which should be tackled seriously, and the development of AS levels was a step in the right direction.

Effective action should be taken to break the vicious circle which perpetuates the shortage of maths and science teachers - even if this meant differential salaries. Similarly, there should be a major thrust for the machine conversion courses, and

increased recruitment of women into engineering.

Mature students also needed to be encouraged to pursue engineering courses, and the NAB was considering weighting part-time students, but was looking to increased Government funding for this purpose rather than shifting scarce resources.

Finally, clearer signals were needed from the world of employment to convey to school-leavers and students that engineering could be as rewarding as accountancy or law.



Having been born into a world of designers and craftsmen and attended a college of art in which design was a major activity, I have always taken design for granted and am therefore surprised as well as delighted when it suddenly becomes fashionable and we are encouraged to acknowledge its importance.

The Prime Minister has done her best to encourage it and no doubt thus put a lot of people off. Recently Terry Wogan has interviewed Sir Terence Conran and that would be the ultimate accolade were it not that Wogan will shortly have interviewed everyone in this country and made them all look equally foolish, or at best eccentric.

The difficulty for people like me is that we recognize that everything around us has been designed by someone, especially in an increasingly man-made, technologically advanced world. We ask ourselves what is good design and, as with truth, do not always wait for an answer.

It occasionally worries me that perhaps it does not, after all, matter. Or, to put it another way, perhaps the best designed artefacts are those which are so unnoticeable that they are taken for granted. Eric Gill's view was that an artefact was good if it did its job well. In the same tradition, writers about design have discussed "nearness to need" and "fitness for purpose" as some of the criteria.

What has revived this question in my mind is reading Paul Goldberger's collection of articles from the *New York Times*, rather clumsily entitled *On the Rise*. Goldberger has been the architectural critic of that paper for more than 10 years. His articles are thought-provoking in more ways than might be expected.

If their standard is typical of popular architectural criticism in the United States, there are invidious comparisons to be made with the arid, boring and colourless prose of the architectural critics in this country's newspapers. His comments range widely; the book is subtitled *Architecture and Design in a Post-modern Age*.

In a 1981 essay entitled "Commonplace Things of Great Design" he discussed a survey among leading members of the design profession in which they were asked to name outstanding examples of successful design. "Among the most intriguing preferences were the paper clip, the safety pin, the yellow pencil, Levi's blue jeans, the Thermos bottle, and the clay flowerpot."

To them he would add the wire coat-hanger. I would add a lot of ordinary kitchen ware, the zip fastener, the ordinary bicycle and the ordinary, traditional, National Health Service wheelchair which I have learned to respect because, despite its hideously clumsy and improvised appearance, it does its job superbly.

Wire coat-hangers I cannot abide because they get everywhere and catch you out when you're not looking. Dave Allen shares this antipathy and thinks they are following him around and secretly breeding overnight in wardrobes. But I have to accept their usefulness; even as I twist them up and stuff them into a dustbin when my wife is not looking. On the paper clip, I have much to say.

So I shall devote a few columns to this important subject from time to time. And if any of my readers would like to add to the list, I would be grateful and will discuss their preferences too.

Patrick Nuttgens

Letters to the editor

Accounting for the perks

Sir, - I read with interest your article on the exodus of "top talent" from the university system to better paid jobs in commerce and industry (*THES*, October 18). However well intentioned I think that your article suffers from a flaw which has become rife in the latest issues of *The THES*, namely, disregard for the principle of academic accountability.

I suggest time has come for an honest examination of the real occupational status of the lecturer in comparison to, say, that of a police constable. I have purposely chosen the latter because the issue of accountability (or the lack of it) is usually brought about in connection with this occupational category but rarely with the former.

Let us take a lecturer with a salary of £13,000 per annum. Is he/she really earning such an amount? However "reactionary", my opinion is negative: a lecturer gets further rewards. To start with few would deny that con-

siderable social prestige surrounds academic occupations. There are also quite a few perks such as cheap sports facilities, meals, and comparatively generous holidays. My experience has also shown that some lecturers make liberal use of stationery, library, photocopying and expensive computing facilities. I know of a sociology lecturer enjoying three bulky Economic and Social Research Council research grants with a remarkable number of (tax-free) travelling expenses.

Summing up, I hope that lecturers will get better remunerations but I expect that such a move will be conditional on the optimization of academic accountability. As *The THES*, (May 24) rightly pointed out, "there are outstanding questions about how answerable universities (and research councils, I would add) are in the event of complaints from staff, students or the public". Indeed, a committee on academic accountability

(modelled on the image of the local police committees) could prove to be more useful than a few inaccessible visitors.

Yours faithfully,
BRUNO GIORGI,
Industrial Systems Division,
Hoskyns Group Limited.

Sir, - The Association of University Teachers has rejected an offer of a 4 per cent salary increase. The association's arguments for a larger increase might be more plausible if it were able to explain why the people for whom it is seeking the increase, consider, in their capacity as the ruling classes within universities, that the same percentage, though a far smaller amount of money, is a suitable offer to make to their own low paid employees.

Yours faithfully,
PAUL ROLFE,
22 Line Close,
Frome, Somerset.

Liberal line on Green Paper

Sir, - Could it be that the ease with which the Labour Party is adopting the principle of "parity of funding" between the sectors of higher education illustrates both its lack of seriousness about policy-making and its inherent centralist approach to these matters?

The Liberal Party could equally have made such a public commitment and maybe a few people would have been happier as a result (though I doubt whether Jean Boockwala would have devoted a column to the fact). But in doing so we would have done the complexity of the funding of higher education and the much more urgent need for any government to develop a clear and widely accepted analysis of the differences as well as similarities between institutions and between sectors.

If we ever do get "parity of funding" it is more likely to be through accident than design and we won't know that it has happened until several years later when the statisticians have come to terms with disputes over the length and nature of courses, the impact of research funding and the relevance of historical factors such as the age of buildings. As the National Advisory Body argued, we should not pursue "equivalence for its own sake". And we should take note from the experience of falling rolls in secondary schools that the unit of resource is not always a good guide to the effective funding of an educational institution.

It is better surely to pursue a more meaningful line of policy-making as in the Liberal assembly motion of 1981 and in our forthcoming response to the Green Paper, than to indulge in simplistic sloganeering. A sustainable higher education policy requires funding that sustains it. The process should not be reversed.

Yours,
ALAN LEAMAN,
Chair, Liberal Party Education Panel,
10 Garth Court,
Woodfield Grove,
London SW16.

Mixed myths

Sir, - Reviewing Keith Sagar's new book on D. H. Lawrence, (*THES*, October 11) Philip Hobsbaum rather prominently foregrounds an article of mine on the unnoted interweaving of American Indian and Celtic myth in *Mauve*. So far so good. But he then attributes it to the wrong journal - and assures potentially interested readers that it won't be available in their students' libraries anyway!

The article in question, titled "Welsh Red Indians", will in fact be found on pages 158-179 of the 1982 volume of the *Oxford periodical Essays in Criticism*, readily available in every academic library I have ever used. Professor Hobsbaum will find that it includes not only the particular items of information, reproduced by Sagar, which he kindly assumes, but also - oh, much, much more!

Yours faithfully,
KEITH BROWN,
University of Oslo,
Blindern, Oslo.

Sir, - Keith Sagar is right to take me up sharply (*THES*, October 25). I said, in a review of his *D. H. Lawrence: Life into Art*, that he had misprinted "Barran Gentians" when editing a Penguin selection of Lawrence's poems.

The poem has indeed been misprinted in several anthologies, including Robert's *Faber Book of Modern Verse*, Rider's *Little Book of Modern Verse*, and Macbeth's *Poetry 1900 to 1965*. It was the misreading in this last - "the arms of Plutonic" - that I am accountable attributed to Dr Sagar's edition, and I offer him my apologies for this mistake.

PHILIP HOBBSBAUM
Titular Professor of English Literature,
University of Glasgow.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend letters if necessary.

Labour promises tough line on NAB

by John O'Leary

Some Labour politicians will consider withdrawing from the National Advisory Body (NAB) if Sir Keith Joseph, Secretary of State for Education and Science, confirms a budget requiring further cuts next year in polytechnics and colleges.

Leaders of the local authority associations met Sir Keith last week for their statutory consultation on next year's spending throughout the education service. As expected, he confirmed that he was proposing to limit the advanced further education pool to £600 million, although the possibility of some extra money was left open. The local authority representatives, in the course of the case for at least £15 million more to enable the NAB to fulfil its existing commitments without reducing access for qualified students. They are expecting to get less than half that amount if ministers do decide on recession.

Mr John Pearman, deputy leader of the Association of Metropolitan Authorities' delegation, said: "I found it one of the most depressing encounters we have ever had with the Secretary of State. Some of us did not mind words about what we felt."

"There is no doubt that the sector is in crisis, both in advanced and non-advanced further education. It does not make the question whether some of us can carry on doing the Government's day work, because it will require surgery if the quantum is confirmed."

Mr Pearman claimed that Sir Keith was "wreaking vengeance" on the local authorities for settling the lecturers' pay dispute and was basing his proposals on unrealistic forecasts of inflation.

The NAB secretariat has warned that up to 6,000 places will have to be cut in colleges and polytechnics if the size of the pool is not increased. The body has made it clear that funding levels cannot be reduced further, although the Department of Education and Science has called for new economies in staffing.

Labour councillors represent a majority of the local authority membership of the NAB committee and their withdrawal would provoke a constitutional crisis for the body. Labour is now the largest party in both the local authority associations which they represent.

Next week's meeting of the committee will be a crucial one. Sir Keith is expected to give his final decision on the size of the pool before the meeting, which will be chaired by Mr Peter Brooke, under-secretary for higher education. The local authority representatives have reserved their right to make a further appeal to Sir Keith in their role as the leaders of the NAB - a strategy which has produced some additional funding for the sector in previous years.

Consideration of the cases of 15 colleges which have registered bids to be designated polytechnics is to be postponed until next year, if the NAB board and committee accept a study group's recommendation. The group received a report based on numerical criteria for upgrading but decided that wider issues had to be considered and that the question would be best addressed as part of the NAB's next major planning exercise.

Mr Griffiths called for flexibility from validating bodies such as the Council for National Academic Awards and the Business and Technician Education Council.

The union has asked funding agencies such as the National Advisory Body for public sector higher education and the Manpower Services Commission to recognize the long term necessity of ensuring that the city's further education service survives.

city this week: "We are approaching the local authority associations with a view to enlisting the help of college principals and polytechnics directors in catering for students from outside Liverpool."

Mr Griffiths said: "If the colleges and polytechnic close, thousands of students will be stranded, many in the middle of their courses. If events look like turning out as seriously as some people have predicted, we shall seek to apply pressure to the university to do what it can."

● The National Union of Students has offered the polytechnic students union a £15,000 loan to ensure it does not have to lay off staff until the end of the year.

Stirling University's academic council has vetoed plans to axe fine art and music, and cut back philosophy and religious studies. The council, Stirling's senate, decided at a five-hour meeting this week to send the plan back to the board of studies for further consideration.

The council backed an increase in student numbers from the University Grants Committee's target of 2,100 in 1984/85 to 2,550 in 1989/90, while stressing that Stirling has constantly argued for a full time student population of at least 3,000. However, the proposed increase is heavily weighted towards science, management and social services.

The institutions nearest to the 10 per cent cut off which escape sanctions this year are the Universities of Exeter (12.5 per cent), Stirling (14.2 per cent), Southampton and Leicester (both 15.3 per cent).

● Full conference report next week.

Editor of The Times dies after courageous fight

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Tribute to his courage was paid by Mrs Margaret Thatcher, the Prime Minister, who said: "Throughout his life he showed a dedication to his work in the face of great adversity. I am thankful that he lived to see - and enjoy - the bicentenary of his great newspaper."

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DON'S DIARY

MONDAY

Arrive at our new site, and pick my way around the piles of green crates lining the corridors. Find my study piled with yet more green crates filled with books, journals and office odds-and-ends, and heaps of racking for shelves. Manage to move enough around to get a chair behind a desk and open the crate I hope contains paper, pencils, filing boxes and reference materials. It doesn't - labels come off the plastic all too easily. But it does contain a copy of my last Don's Diary. In 1983 we were preoccupied with the academic politics of planning a merger; decide to keep a record of this week of physical merger.

Told my bookshelves should be erected tomorrow and I can make a start on creating order. Laboratories are in as much chaos as my study, with each technician busy trying to prepare at least a working space for our new intake of students who arrive in seven days. There are no telephones installed in our unit office, but this is probably no real disadvantage as the overloaded system fails at least three times during the day.

TUESDAY

PhD student arrives, and spends some time, using a coffee table as a chair, discussing progress and planning next steps. Conduct her, a newly appointed lecturer, and a visitor who will spend the next four months with us, on a tour of the site, filling in some detail for myself at the same time. Some studies have bookshelves or built in shelves, and the occupants have managed to produce a pile of empty crates. Each study is showing individually: a major change for staff from our side of the merger, who mostly had to share a room on our old site.

I visit the newly reopened library, checking some references for a paper to be given in Israel in 12 days, and return to my study just in time to take a phone call from Paris: the Chinese have invited me to act as a consultant in November/December. No shelves today. Leave at 5.30, to find a staff member extinguishing a fire in waste packing material at the bottom of the stairs in the science education block. Arson or accident?

WEDNESDAY

Collect Spanish visa for visit next Wednesday and Thursday, then meet with individual MA students about next term's programme and a PhD student. Finalize the arrangements for Tuesday's external examining visit to Bath to ensure I can get to Heathrow in time for my Barcelona flight. No shelves; no crates unpacked.

THURSDAY

Carpenters arrive at 10; shelves will go up today. Find a seminar room that has been cleared of crates and spend two hours with a colleague discussing his draft chapter for a book being prepared as a result of a series of informal seminars over two years. We explore ways of cutting the manuscript by about 50 per cent, and consider which of the themes can stand alone to convey a feeling of the way science is used in everyday life. End our session with a discussion of last minute adjustments to tutoring arrangements, and tour the labs which the technicians have transformed. Now more confident that there will be a place for students next week.

Carpenters report that some racking is missing from the study, and we find some spare pieces not needed in the newly arranged laboratories. Lunch in the bar with colleagues from both merged departments, and am pleased that we seem to be adjusting rapidly to the new demands and uncertainties of space allocation, meeting rooms, and resource areas. Spend three hours unpacking two-thirds of my crates, and find that shelves are slotted too far apart. Will need to rearrange them and insert additional shelves if I am to fit everything into the room. Leave for home at 7.30 and reflect that winter evening classes are going to be less alluring now that it takes five times as long to the nearest tube station.

FRIDAY

Go directly to Oxford Circus for coffee with a colleague from the British Museum (Natural History) before meeting the director of the foundation in that will mount the international conference on communication science to the public for which we have been seeking funding over the past year. The three of us spend two hours discussing topics, possible speakers, selection of participants, and publication arrangements. Get back to the campus and attend the last 10 minutes of the first sherry party of the new centre. A colleague points out that with the exception of the head of department, myself, dressed in a suit because of this morning's meeting, and myself, wearing tie and jacket for an afternoon visit to arrange teaching practice placement for the new session, the only other men in the room wearing ties are all the former members of the other merging department. Does dress so starkly reflect our different origins and traditions?

In the afternoon, chair the first subdepartmental meeting of academic and technical staff, and find a unanimity of purpose, of commitment, and of determination to provide good courses for students on each version of the initial training programme in this year of transition. No divisions along sartorial or other lines are evident. All academic staff present express admiration and gratitude to the technicians, who have produced so much order out of so much chaos, in so short a time. Pack my notes for next week's presentations so that they can be converted into overhead projector transparencies on Saturday.

SUNDAY

After final adjustments to lecture materials, take the family to the new site for the first time. Their comment that "this looks like a proper university" reflects the contrast between our previous cramped converted warehouse and the space, the lawns and gardens, the on-site tennis courts, and the "academic" buildings here. They play tennis while I finish unpacking crates and hanging pictures, except for the one with broken glass, the only damage in my move although some colleagues have major tales of woe.

Home to pack bags ready for a fortnight of conference and examination appearances, and prepare for Monday morning's meeting with the first students to enter our new centre and the inaugural meeting of the new academic board, scheduled for Monday afternoon.

POSTSCRIPT

On Monday within 20 minutes of my arrival on campus plans change and my secretary is efficiently, quietly and supportively cancelling my existing arrangements, while I recognize teaching and find an immediate flight to Australia. By evening I am on my way to bury my father, who died unexpectedly about the time I was coming to work. Twenty-seven-hour flights are not good places to mourn: there is no one to cling to.

Arthur Lucas

The author is professor of science curriculum studies, King's College, University of London.

Row erupts over charter

by David Jobbins

The Labour Party's planned charter for higher education may be delayed by an internal row over whether it is radical enough. Socialist Education Association secretary Mr Graham Lane this week appealed to Labour leader Mr Neil Kinnock to delay the charter - planned for an early December launch - and suggested it should be issued as a discussion document rather than a full-blown policy statement.

The SEA also called for the disbandment of Higher Education for the

Labour Party, the pressure group launched by shadow education secretary Mr Giles Radice at the Bourne-mouth conference, and put forward its own broadly-based campaign group to mobilize the wider trade union and student movement.

The SEA has established a working party to develop a comprehensive post-16 policy. It fears the Labour plan may not suggest sufficiently radical university reforms, and intends to produce its own alternative to the Government's Green Paper early next

year followed by a consultative process.

Mr Lane said: "The universities, opposed to the polytechnics, have been notorious for blocking social reforms."

But Mr Radice was angry that the SEA had turned on HELP and a charter without first discussing it with him. "I shall be asking their executive to come to meet me," he said.

Labour's education team has been hoping to launch the charter at the National Union of Students conference early in December.

Mr Lane said: "The document, although it is an improvement, does not go as far as we want it to go. It should take a little longer to get right."

The SEA has withdrawn from HELP, where it had one seat on the steering committee and invited HELP members to join its own special committee. It is now a separate body, despite its name change to the Academics for Labour, HELP still seem too elitist and deter support from students and ancillary workers.

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Labour spokesman Mr Giles Radice

Brooke tears into 'unrealistic Labour'

by Carmel Fitzsimmons

The under-secretary for higher education, Mr Peter Brooke, has launched a scathing attack on Labour's education strategy. He told a Cambridge Students Union meeting earlier this week that Labour's plan was "unrealistic and vague".

"From what I understand they are planning to spend £1 billion on student support. What else is going to be spent after that?" he asked.

Mr Brooke - who shared the platform with Giles Radice, the Labour spokesman on education, Mrs Anne Sofer, chairman of the SDP education panel, and Andy Whyte, vice president of the National Union of Students - said he felt the higher education sector was responding positively to his department's Green Paper.

"In our latest talks with the Committee of Vice Chancellors and Principals I was pleased to see a recogni-

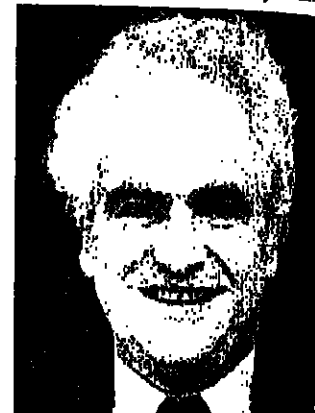
tion that it is up to the university system not just to convince the Government but also the nation that more money should be deployed."

Giles Radice said his party had the awesome responsibility of repairing the damage that Peter Brooke would have inflicted on higher education by the end of his term of office.

"It is not simply a question of shifting resources out of a declining budget," he said. "Higher education needs more resources but a bargain will have to be struck."

He said he wanted more opportunities for mature, part-time and female students. Universities and polytechnics must move closer to their local communities.

He dismissed Mr Brooke's figure of £1 billion as exaggerated and said it might represent the total of Labour's planned expenditure but he confirmed that his first priority would be to restore the level of student grants.



Labour spokesman Mr Giles Radice

Better deal for engineers

The long struggle to raise the status of the British engineer is having some effect, to judge by the latest survey of the profession conducted on behalf of the Engineering Council.

The survey, of 12,000 chartered and technical engineers, found that their earnings were increasing faster than inflation and chartered engineers now make well over £17,000 a year on average.

Chartered engineers with degrees tend to do better than the average, and their earnings go on rising further into their careers than non-graduates. For all respondents, the unemployment rate is very low, less than 1 per cent for chartered and technician engineers.

A majority of the respondents said they would recommend engineering as a career. The figures indicate they should give an extra recommendation to chemical engineering, and to a career with a nationalized industry, or in general management or technical administration, which attracted the highest salaries.

Influential support for Dundee's Euro-college

Staff at Dundee College of Education have won support for their scheme to become the first European Community college of education from more than 30 MPs, including three party leaders and two former prime ministers. Mr Edward Heath and the Earl of Stockton.

Liberal leader Mr David Steel, Dr David Owen of the Social Democratic Party and Mr Gordon Wilson of the Scottish National Party have all written backing the proposal, and the Convention of Scottish Local Authorities, the Scottish Trades Union Congress and the Educational Institute of Scotland have all set up committees to consider the scheme.

The move by Dundee staff, led by the local branch of the Association of Lecturers in Colleges of Education in Scotland, was precipitated by a report from the National Audit Office which singled out Dundee as having surplus accommodation.

In 1975, Dundee moved into new buildings for 1,800 students, but currently has only 500. However, staff

argue that the college already has virtually all the facilities necessary for a European centre.

They have now drawn up a detailed plan which they hope Mr James Douglas, MEP for north-east Scotland, will be able to bring before the European Parliament.

The college's three main functions would be curriculum development, staff development and an information resource base, the ALCES document says, and would be likely to cost the EEC around £8 million a year.

It proposes seven faculties: language, literature and linguistics; maths, science and technology; aesthetic and expressive arts; social subjects; vocational and life skills; information technology; and social education.

A European centre is vital, ALCES argues, because of the pressures of youth employment, the technological revolution, the need for career guidance and vocational training and the discrepancies in provision in different countries.



Slade school graduate Cally Saunders' "Telephone Poem" was one of five works which earned the part-time £1,000 Boyce Scholarship this summer, and the attentions of the Contemporary Art Society, who run a studio in Britain, and teaches part-time at Norwich Art School. An exhibition of her work is currently on show at the South Gallery in London.

Lindop stands up for lecturers

Individual teachers and institutions, rather than validators, performance measures and bureaucrats, defend standards in polytechnics and colleges.

That is the view of Sir Norman Lindop, chairman of the recent inquiry into validation in public sector higher education, who was speaking at a conference on effectiveness in further and higher education at Manchester Polytechnic.

Sir Norman was defending the inquiry report, commissioned by Sir Keith Joseph, Secretary of State for Education and Science and published last spring. The report recommended complete freedom from external validation for some institutions and greater flexibility in approving others.

"I am not denouncing bureaucracy because it is the tool of retrenchment. I am arguing that the essentially sterile and self-perpetuating activities of the necessary minimum number of bureaucrats be constantly checked and informed by an infusion of the lifeblood of education - those

Resistance to change among academics was as much to blame for the rituals and bureaucracy of the Council for National Academic Awards as the council's own bureaucrats," Dr Alan Hibbert, CNAA assistant chief officer, told the conference.

If the system of national peer review was lost, courses in polytechnics and colleges would be less effective, he said. The current CNAA proposals to devolve validation to institutions' academic boards - being tried out in Sheffield and Newcastle Polytechnics - was a replacement of

Dr Norman also attacked the

bureaucratic pressures on institutions to measure efficiency and effectiveness by performance indicators. Current measures of graduate employment were crude and superficial, he said.

"All we have at the moment are inadequate indicators and paradoxes. More than the minimum bureaucracy necessary in a time of cuts and retrenchment inhibited the polytechnics and colleges from being flexible in their courses. It is in the costs and resources areas that the bureaucrats come into their own. If it moves, measure it and then express it as a ratio or index. Vast tables of figures can then be assembled with little effort, and committees convened to deliberate upon them."

Public sector institutions had to show flexibility, with some additional regional and national contribution to peer reviews, access and credit transfer. The Lindop report had been unfairly criticized as being hostile to access for entrants to higher education without traditional qualifications, he said.

CNAA chief defends 'ritual' of national peer review

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CONFERENCE REPORT

Karen Gold reports on a conference at Manchester Polytechnic on effectiveness in further and higher education

at the chalkface." Sir Norman said. All the trends in higher education were in the wrong direction, towards rigidity and away from flexibility in areas like part-time and sub-degree work, he said. The universities were probably beyond redemption, because they were defensive and preoccupied with their system of validation by research.

Public sector institutions had to show flexibility, with some additional regional and national contribution to peer reviews, access and credit transfer. The Lindop report had been unfairly criticized as being hostile to access for entrants to higher education without traditional qualifications, he said.

CNAA bureaucracy with institutional bureaucracy.

CNAA wanted to reduce its bureaucracy, which had been criticized in the Lindop report on public sector validation. But, he continued, "Members of CNAA boards and committees are generally culled from institutions themselves. Even the changes in the council's charter and its agreements that the council now wants to put into action are resented and in some cases being prevented by some members from institutions, who see this as a threat to the quality of validation."

Dr Norman also attacked the

Performance indicators 'no accurate measure'

It is rubbish to assume that performance indicators can be used to evaluate the work of higher education in a series of tidy mathematical relationships, Mr John Bevan, secretary of the National Advisory Body told the conference.

"We have a set of indicators, none of which actually measures precisely what we would really like to measure. Indeed, we know that the thing we would really like to measure is not in that sense measurable," he said.

There were indicators of quantity - student-staff ratios, costs per student, target numbers, wastage rates, space utilization - and of quality, of which the main one was validation and peer group review. The NAB opposed the Lindop recommendations and wanted a system of national peer review retained.

All those indicators were relevant, but the relative degree of their relevance and how they were used was at issue. In the end that had to be assessed, and it could only be assessed subjectively, openly and by groups, not individuals.

"Resistance to change by academics is extremely difficult to understand, but it's there."

The past work of CNAA had been responsible for ensuring comparable standards; improving courses, buildings, resources, the quantity of research and scholarship in the public sector, and staff development. The Engineering Council currently recognized the worth of external validation in its attempts to upgrade engineering degrees, since it was meeting the greatest resistance to change not in the public sector but in universities, he said.

Dr Norman also attacked the

The idea of "value added" as an overall indicator of quality was being discussed increasingly, Mr Bevan said.

The idea - to measure class of degree against a graduate's A level score on entry, thereby obtaining an input/output measure which took into account institutions' different priorities on access and teaching - was superficially attractive.

But in fact departments attracting equally able candidates might use different techniques for weeding some out - either high A level scores or stringent interviews - and then achieve the same degree results. "Does the observed low correlation between A level and degree classification confirm different teaching qualities in different institutions, or the fact that A level scores are not a good indicator of intellectual ability, or that there are variations in degree standards?"

"In other words, the value added concept requires assumptions to be made about entry and exit measurements for which there is no credible basis."

The strongest appeal to keep external peer review, proposed for abolition in some institutions by the Lindop report, came from the National Union of Students, who felt students' opinions had been included in CNAA validation but might be excluded in internal validation, he said.

"External peers have to be involved in such a way that the institution can legitimize its own academic standards. It's no good assuming you can do it internally, and then find out in five to 10 years that down the road they were doing it better."

V-c to head 'critical' geology study

by Jon Turney
Science Correspondent

Sir Clifford Butler, vice chancellor of Loughborough University, has been appointed chairman of a joint inquiry into geological surveying in the United Kingdom by the Natural Environment Research Council and the Advisory Board for the Research Councils.

The inquiry follows widespread criticism of the position of the British Geological Survey, which receives most of its funds through the hard-pressed NERC. The new study is along similar lines to the recent Kendrew committee inquiry into future support for high-energy particle physics.

The terms of reference call for a report on geological surveying needed to underpin basic and strategic research funded through the Department of Education and Science, on the demand for surveying from paying customers such as government departments and industry, and on who should fund such work in future.

The other members of the study group are: Sir Alan Muir Wood of the civil engineers Sir William Halcrow and Partners, Dr Charles Suckling, an industrial chemist, Sir Alwyn Williams, vice chancellor of Glasgow University and an ABC member, and Sir Frederick Warner, a chemical engineer.

All the inquirers are fellows of the Royal Society, source of a report earlier this year which made harsh criticisms of the NERC's handling of geological surveying, and of the council's headquarters administration in general. However the council and the society have just issued a joint statement agreeing that many of the problems stem from lack of cash.

This follows a meeting between the NERC chairman Mr Hugh Fish, the society's president, Sir Andrew Huxley, and members of the group which produced the society report on geophysics, attempting to patch up their differences.

However, the new inquiry is sure to receive evidence critical of the NERC from academic geologists, many of whom oppose the appointment of a new "super director" to run earth sciences research.



Lorraine Robinson, a blind Salford University graduate, feared she might have to give up her research into ways of classifying soil by touch, taste, smell and hearing when departmental funds ran out. But the intervention of an unnamed Lancashire firm means she can carry on with her work perfecting a cheap and swift method of soil analysis in the university's geography department. The company has come forward with the £5,000 needed for fees and living expenses for the two-year project.

Scots name chief executive

The Scottish Vocational Education Council has ended months of speculation by appointing Mr Thomas McCool a divisional education officer with Strathclyde Regional Council, as its chief executive.

Mr McCool, who takes up his post in February, is convener of the Scottish Examination Board's committee on research and examination techniques, and chairman of the Scottish Central Committee on Guidance.

NUS seeks to strengthen its grass roots structure

A radical restructuring of the National Union of Students is to be begun next month in order to strengthen the organization at grass roots level.

The aim is to bring the generally poorly organized and under-resourced student unions in further education colleges, where the NUS has the bulk of its membership, more firmly into mainstream policy-making and activity.

The NUS's December conference

will be asked to back a proposal from the national executive which will have the effect of developing the existing patchwork of area organizations into a national network capable of rapid two-way communication with the national leadership and with ordinary students.

The conference is expected to authorize work to begin on the development plan for the beginning of the 1986/87 academic year, and adopt

constitutional amendments to allow the process to start.

At present the NUS has 43 areas but in two of these the organization does not exist while in others it ranges from the highly developed and professional to the barely functioning.

Union leaders hope that a stronger areas network will enable well established unions in universities and polytechnics to help weaker unions in the further education sector play a greater

part in the student movement. The present set-up cannot achieve this because of the wide differences in size and student numbers between areas, and the areas map will be redrawn.

From next year, if the constitutional changes are agreed, areas will come together in national political conventions at least five times a year to act as a channel between the local level and national leaders.



Attacking symptoms, not disease

"Maggie's crusade" screamed the headline (*Daily Mirror*, October 24). Even though I have become quite accustomed to the "woman with a mission" presentation of the Prime Minister I read on ever hopeful, ever wishful. I should have turned the page when I had the chance.

Having led the crusade against the "Argies" over a couple of blands in the middle of nowhere, having "seen off" the miners and, most recently, having shown the leaders of the Commonwealth the error of their ways over economic sanctions on South Africa, Mrs Thatcher has now discovered drugs.

While I welcome action to combat the rising use of hard drugs, especially among young people, I am fed up with the sight of Mrs Thatcher scuttling around looking for crusades to champion while blithely ignoring the real problems facing young people in Britain today.

The six years since 1979 represent six years of waste for young people; opportunities lost, rights attacked and independence curbed. Drugs are not the problem, they are a symptom and the sooner Mrs Thatcher attacks the real disease, the better.

The National Union of Students, along with various other youth organizations, trade unions and political parties, has consistently highlighted the real problems associated with youth unemployment and the lack of independence and opportunities for young people. So far, Mrs Thatcher and her Government have chosen to ignore the causes of the problems while concentrating on an Elastoplast approach to the symptoms. But things are changing and a crusade against the drug barons will not hide it.

The NUS has launched its biggest ever campaign around the issues of youth rights, choice and independence. The "Work for the Future" campaign takes as its basic tenet the fact that Government can take action and is not a hapless observer of market forces. The lessons are there to be learned - some local authorities have shown that intervention in the infrastructure through local enterprise boards and other initiatives can create jobs. We demand that the Government look, listen and learn and follow their example.

But jobs alone are not the solution. Young people should have three broad choices on leaving school - a job, a training scheme or further education. A fully integrated system which provides for a mixture of jobs, training and education will provide young people with the skills and training so vital to the recovery of the economy. Such a system should also provide adequate financial support.

For six years, platiitudes have been offered about young people being our investment for the future. Those platiitudes do not create jobs nor a comprehensive training and education system. Words must be translated into action.

More than 4.5 million young people will vote for the first time at the next general election and whether Mrs Thatcher likes it or not, they are not all thankful ex-drug addicts, ex-rioters or inhabitants of far off islands. Six years of waste has already taken its toll on Britain - will we see two or three years of further waste or will we see a crusade for jobs and a crusade for the future?

Jim Doran

The author is national secretary of the National Union of Students.



The National Union of Students has named its London headquarters after South African black nationalist leader Nelson Mandela. The building, in Holloway Road, north London, is to be known as Mandela House, and was visited this week by Mr Mandela's eldest daughter, Princess Zenzile Dlamini. Pictured at the George Johannes, Anti-Apartheid Movement executive secretary Mr Mike Terry, and NUS executive member Ms Liz Sewell.

Vocational outline endorsed

The interim report containing proposals for the restructuring of the system of vocational qualifications in England and Wales has been formally endorsed by the Manpower Services Commission.

MSC chairman Mr Bryan Nicholson said a vast agenda of work was being uncovered in the review of vocational qualifications, and the interim report published in September by a Government working group of educationists and industrialists - represented only the tip of the iceberg.

In particular, the commission supported the recommendation that a Youth Training Scheme consortium of accredited bodies be formed to co-ordinate and monitor certification nationally for the extended YTS. The report also proposed the establishment, by the MSC, of a number of bodies responsible for standards, assessment and validation of qualifications in time for the launch of the extended two-year scheme in April 1986.

Designation of these bodies, together with the establishment of the consortium, was seen by the working group as a satisfactory temporary arrangement until such time as major reforms are implemented. The spring deadline for the launch of the extended scheme underlines the urgency of the work still to be done by the review group, emphasized in the forward to the report by chairman Oscar de Ville.

Companies in high-tech link

High technology companies in North Yorkshire are linking up with educational institutions for a new updating and retraining programme.

Sponsored under Pickup provision, the updating scheme funded by the Department of Education and Science, the venture will provide training facilities for technicians and craftsmen employed in high technology industries in the region.

The initiative is being strongly supported by York Tek, an association of high technology firms in the area. Together with North Yorkshire County Council it is to make £72,450 in cash and resources available in the programme's first year. A lump sum of £50,000 is being provided by DES and the Manpower Services Commission.

Launching the scheme last week, Sir Keith Joseph, Secretary of State for Education and Science, paid tribute to the involvement of local industry.

"Elsewhere in the UK it tends to be the educational institutions which are the driving force. I am particularly pleased, therefore, that in the case of York Tek, top management in the relevant industries are taking the lead."

Britain awaits Eureka criteria

by Jon Turney
Science Correspondent

More than 40 British groups are involved in talks with potential foreign partners in projects which might fall under the Eureka programme to advance European technology. A meeting of European ministers next week should give them details of whether they will qualify for inclusion in the new scheme.

Eureka was proposed by the French foreign minister Mr Jacques Delors last April, but since then it has proved difficult to establish how the initiative would work. The aim was to establish a new avenue for coordinating high technology projects in Europe, outside the Commission of the European Communities, to help close the "technology gap" between Europe and Japan and the United States.

Eighteen European countries, some with conflicting ideas about the form Eureka should take, have been discussing the idea over the summer. Their foreign or research ministers meet in

Hanover next Tuesday to thrash out final details.

Sir Robin Nicholson, chief scientist in the Cabinet Office, told European journalists this week that the meeting should produce a charter for Eureka and a set of criteria for qualifying projects. The result looks likely to fit Britain's inclination toward an initiative strongly geared to industrial needs, rather than basic research.

France has committed one billion francs to support Eureka projects, but other countries including Britain say only that they will be eligible for public support on the same basis as other research and development plans.

Nevertheless, after initial caution, Britain is now enthusiastic about Eureka, which Sir Robin called a great opportunity for Europe. British officials hope to see action on measures to open up European markets, including standards and product testing.

The administration of actual projects is likely to be left to companies involved, although there may be a central "clearing house" reporting to future meetings of research ministers.

Classics department to go

Southampton University is considering scrapping its classics department as part of the research plan profile it is preparing for the University Grants Committee.

The senate is still discussing the final details of the UGC response, which is due in November 30, but the proposed phasing out of the classics department has already attracted criticism from lecturers.

Professor Gabi Ganz, professor of law, is at the forefront of a campaign to save the department, claiming that the closure proposal was a sacrifice "on the altar of national rationalization".

He added that the plan was a perfect illustration of the "barbarism" of the Government's projected cuts for the universities. "It is undisputed that the

department is academically excellent - three of its members have recently accepted chairs," he said.

"Rather than replace one member of staff, it is proposed that the department be phased out subject to discussions with other universities and support of the UGC. The real price will be paid by the two remaining professors and the rest of the university."

"Theology having preceded classics to the guillotine, we shall have severed both the Graeco-Roman and Judaic-Christian roots from which we are being told elsewhere, the triumph of the West has sprung," he said in the Southampton dons' magazine, *Viewpoint*.

A spokesman for the university said it was too early to make any comment.

'Devious' council attacked for pay-out delay

The president of the National Union of Students (Scotland) has condemned competent and devious for delays in paying increased bursaries to more than 1,300 further education students.

Many of those affected were likely to drop out of their courses because of financial pressures, Mr Alan Smart said.

The students concerned who are married, widowed, divorced or separated until this summer have been paid the lower "staying at home" rate of grant.

But in July the Scottish Education Department advised the region that they should not be considered as

dependent on their parents, and should therefore qualify for the higher "away from home" grant, a weekly increase of £18.41 for those under 18 and £12.80 for those over 18.

Strathclyde has not yet paid the increase. A regional official said this was because the full council still had to rubber-stamp the education committee's approval of the new rates.

"Perhaps some smaller authorities could give it the go-ahead right away, but after the carry-on last year, we couldn't do it without going through the proper committee structure," he said.

Strathclyde discovered to its embarrassment last year that it had mistaken

Threat of legal fight is dropped

by David Jobbins

York University has suspended threatened court action against a student union over a "two platform" policy which led to a bar on a Conservative MP.

The move follows a general election of the union which voted to adopt a policy of freedom of speech without law.

But an amendment designed to enshrine the principle in the union's constitution just failed to gain the required two-thirds majority, although it was carried by 420 to 281. This means that the supporters of the no platform policy are free to try to reverse the decision at any time.

The university would almost certainly revive its legal action if this happened. Senior assistant registrar, Mr Peter Smith, said: "If the situation changed radically, no doubt the university would resume its approach to the court."

"The policy as it now stands does not eliminate the possibility of protest, and the university would wish to protect freedom of protest as much as freedom of speech."

"But it would not look kindly on people disrupting meetings or physically obstructing people coming here to speak."

The university decided to seek a legal declaration that the "no platform" for racists and fascists policy adopted by the union was a breach of its charter after Mr John Carlisle, the right-wing Tory MP for Luton North, was prevented from speaking to the university's Conservative Association.

A referendum late last term ended down heavily against the policy, and the union, which had adopted the free speech motion by 302-219, was one of the largest ordinary general meetings in the union's history.

Letters of support for the campaign for free speech came from Mr Peter Brooke, under-secretary of state for education and science, and the Prime Minister's office.

Students ban tabloids

A second university student union has banned sales of the leading popular newspapers on grounds of alleged sexism.

University College, Cardiff, has halted the sales of the *Sun*, *Mirror* and *Star* because of their "topless pictures". "We believe such pictures degrade and exploit women's bodies," Mr Pat Young, the union president, said. "The executive decided we shouldn't be making money by selling such material."

Earlier this year, Leeds University union also banned sales of the three newspapers - and added *Amateur Photographer* to the proscribed list.

But the union ran into trouble last year when its wholesaler who insisted loyalty that they had to buy copies of the banned national newspapers even if they were not put on sale. But later negotiations averted the threatened loss of up to £1,600 a year.

The editor of the *Mirror*, Mr Richard Stott, said the students were wrong to ban it. "It is a very long time since the *Mirror* ran photographs of topless women in the paper. Ours is a family newspaper designed for everyone."

ly been paying the higher rate to a number of students.

The region is poised to pay out the backdated awards after the council meets next Wednesday and this week has sent out a notice to further education colleges explaining to students what is happening.

But Mr Smart said the NUS had urged the region to send letters to the students involved telling them how much more money they would receive.

"This is the most vulnerable group of students, including people with young families. It is not your 19-year-old guy who can get by on a slice of bread and a can of lager."

Students win new hearing

by Peter Aspdren

Students, staff and graduates of Durham University have called for a special meeting of the university convocation to discuss further the response to the University Grants Committee questionnaire on research plans.

The more parties in the discussions reflects their concern that the response will act as a prelude to further UGC cuts.

The students' union president, Mr Patrick Martin, said that although formal talks on the response had been fairly open, the students and non-academic unions had not been properly consulted because the university wanted to "avoid trouble and controversy".

"This is the most important document the university has had to consider for some time, but there has been no provision for an input from the local community, or from most of the non-academic staff here," he said.

"We are not actually expecting to change very much, but we feel the discussions on the research plans should be broadened to include as many people as possible."

Mr Martin said the students' union would press for the university to refuse to blank to implement any further UGC cuts, because of the harmful effects of previous cuts during recent years.

"We are particularly concerned about the support services, such as the health centre and the careers advisory service."

The students collected 50 signatures to request an emergency meeting of the convocation, which will take place on Monday. The meeting will have powers only to refer back any topic raised to the council and senate.

Successful conversion

Arts and humanities graduates really can master the mysteries of information technology. An HMI report published this week gives the thumbs up to the IT "conversion courses" mounted in colleges and polytechnics in the first year of the Government's special information technology initiative.

The inspectors looked at 30 courses in nine polytechnics, including 12 postgraduate courses, catering for around 30 per cent of the new IT students in the public sector of higher education in 1984/85.

They report an overwhelming response to the new postgraduate conversion courses in information technology, although the response for engineering courses was poorer. And the courses themselves are generally judged successful.

The Information Technology Initiative is a Public Sector of Higher Education Report by HM Inspectors. Copies free from DES Publications Dispatch Centre, Honeyport Lane, Stanmore, Middlesex HA7 1AZ.

Hotel courses booked for NAB expansion

by John O'Leary

Student numbers in three subject areas may be increased as a result of new consultative exercises launched by the National Advisory Body.

Three separate consultative documents have been issued, dealing with hotel and catering courses, building courses, and those in physiotherapy, chiropody, occupational therapy and allied fields of study. Responses are being sought by the end of the year, so that they can feed into the NAB's next national plan for polytechnics and colleges.

The inquiries into building and hotel and catering were prompted by industrial claims of an under-supply of graduates. In the case of the paramedical subjects, the main issue is their interrelationship with the National Health Service, but it is accepted that there is a shortage of qualified chiropodists and occupational therapists.

Almost 4,800 students were registered on public sector hotel and catering courses last year, while only one university offered such courses. Substantial increases in jobs at all levels of the industry are forecast but only a "modest increase" in students has been planned by the NAB.

The inquiry, which has been wide-neded at the request of the Government to include tourism generally, will also consider whether courses are becoming too narrowly vocational and whether the needs of the industry would be better served through a general first degree, backed up by postgraduate or post-experience courses.

The building industry is another which has complained for some time of a shortage of qualified recruits. Universities have contracted, and the building industry has expanded. The building industry is another which has complained for some time of a shortage of qualified recruits. Universities have contracted, and the building industry has expanded. The building industry is another which has complained for some time of a shortage of qualified recruits. Universities have contracted, and the building industry has expanded.

Go for hard sell, colleges told

by Carolyn Dempster

Colleges have been urged to adopt more aggressive marketing and management techniques to meet employer demands and equip students with qualifications better tailored to the needs of the economy.

"In today's world the successful college is the aggressive college; the college that does not just try to sell what it has got, but which hammers on employers' doors and refuses to go away until management have addressed the question of their future skill needs," Manpower Services Commission chairman Mr Bryan Nicholson announced at the launch of a £1.6 million three-year responsive college project this week.

The experimental project, to be run by a two-man team at the Further Education Staff College, will explore ways in which colleges can better serve

employers by operating exemplar schemes in 10 local education authorities.

A steering group appointed to oversee the project is to meet for the first time next month when the first four projects will be chosen from 12 local bids. The success of these projects, set to start in the new year, will determine the future launch of an additional six projects next October.

The concept of the responsive college has been given additional support because of the mismatch of skills and needs, leading directly to longer dole queues.

Mr Nicholson castigated employers for being notoriously backward when it came to identifying the skills they need and communicating this to the education world. But pointing fingers would not help to secure jobs or reduce skill shortages, and the onus

remained on the colleges and polytechnics to cross the divide and confront industry, he said.

"We need colleges that are not content with approaching the major employers but are prepared to go into the largely untapped market place of small and medium-size firms to sell themselves there."

"And we need colleges that are prepared to adapt - to completely restructure if necessary - their management and operational systems to handle the new business they acquire."

A more businesslike approach would entail sending out full-time staff to research market needs.

"At the end of the day we hope to have clear examples of how marketing techniques that overcome the reluctance of employers can be linked with effective and flexible college management," Mr Nicholson said.



Epichem Limited

CIALTY CHEMICALS FOR THE SEMI CONDUCTOR INDUSTRY



Success story: Dr Tony Jones (centre) with his £5,000 prize from the British Technology Group for coming third in its academic enterprise competition, open to academic researchers who have set up a new business based on research results. Dr Jones did research at Liverpool University before setting up Epichem, a chemical manufacturing firm. He is with his colleagues Mr Barry Leese (left) and Mr Graham Williams.

Survey highlights interest in study among unemployed

A survey of unemployed people in Sheffield has unearthed widespread interest in provision of adult education aimed at those without jobs.

The research, funded by Sheffield City Council, followed an attempt by the Workers' Educational Association to mount a comprehensive programme at an unemployment centre in the city, and the realization that many people were not aware of the opportunities available.

The research team quizzed people attending unemployment benefit offices in the city, and followed through with interviews. Their survey revealed that despite negative experiences at school, many people had already attempted post-school classes, and expressed interest in further studies. Younger people were more keen to follow vocational courses, while among the older group there was some

hesitation about returning to study. Many requested basic skills tuition as a first option, with politics rating second in popularity. Questioned about their political beliefs, some said they had become radicalized by their experience of unemployment, while others had become totally alienated from the political system.

Among interviewees the average period of unemployment was two years and two months, but for the seven black people, the period was substantially longer.

Practical problems such as transport, location of classes and their timing were not viewed as a handicap. They stress the need for counselling and guidance services to offer individual help; and for collaboration between a large range of educational providers to offer courses for unemployed people.

New guide to IT jungle

A new accreditation council was set up last week to guide students through the jungle of commercial information technology training.

The Information Technology Training Accreditation Council will initially offer advice to overseas students, following complaints to the British Council that some of the estimated 300 companies offering training in the field give a poor service.

The council will be chaired by Sir Monty Finniston, and will invite training providers to apply for accreditation, to be granted if they subscribe to a standard code of practice and complaints procedure.

The board of ITTAC includes representatives from the National Computing Centre, the Engineering Industry Training Board, and other organizations concerned with computing education.

Record numbers apply to OU

Applications for places on Open University degree courses broke all records this year.

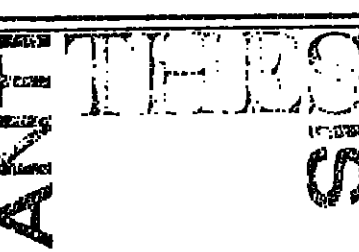
The OU was inundated with more than 56,000 applications, beating the previous record of 51,540 set in 1976, it was announced this week.

As the university has to limit numbers on undergraduate courses, some 24,000 who applied to begin their studies in February next year will not get a place. Last year the OU turned away 17,000 applicants.

The record application level comes despite the increasing cost of studying with the OU - a first-year undergraduate course now costs approximately £250.

Apart from the undergraduate programme, the OU was also successful in attracting large numbers of students for its management, scientific updating and continuing education courses.

The university now boasts a total student body of 120,000.



Spiderman and his furry friends

Small queues of grown men holding jam jars are forming outside Plymouth Polytechnic. The reason is an appeal by technician Mr Peter Smithers for spiders to provide evidence for a study of eight-legged life in Plymouth homes. So far about 30 people have responded to the call; some outsiders, but mainly polytechnic staff, who tell Mr Smithers he can come and collect their jam jars and contents, provided he doesn't tell spider-wary colleagues what he is there for.

Mr Smithers, as well as being interested in the numbers of spider species in Plymouth, is also a spider fan. "They're wonderful - absolutely beautiful creatures, and they're very friendly as well," he says. So friendly, they even allow themselves to be examined under the microscope without wriggling. After which he releases them in a discreet - corner of the polytechnic car park.

Cutting edge was too sharp

An exhortatory notice from the principal appeared on the walls of Nene College last week. The college was one of 15 whose bids for polytechnic status were on the National Advisory Body agenda. So, said the notice, would everyone please turn up for a lecture by higher education minister and NAB chairman Mr Peter Brooke - to impress him with the cutting edge of Nene's academic quality.

Only sometimes you can be a bit too clever. After a ministerial tour de force - with slides - on the sterling work of the Natural Environmental Research Council, a college questionnaire was tactless enough to inquire why the NAB (under Mr Brooke) was proposing to cut environmental sciences. The minister heeded. "I would need notice of that question," he said. Just as well that decisions on polytechnic status look like being postponed for another year.

Edinburgh University last week opened its residences' administrative offices to their most notorious former inmates: the girls of St Trinian's.

Cartoonist Ronald Searle based his infamous series on a genuine Edinburgh school: St Trinian's. He presumably changed the spelling to protect the gullies. One hundred and seventy of the real girls of St Trinian's were not invited to attend their freedom and fresh air education attended the reunion of the school, which closed in 1946. Among them, true to the spirit of the event, was a 62-year-old grandmother dressed in traditional ginslip, stockings and suspenders, and brandishing a hockey stick and gin bottle.

The board of ITTAC includes representatives from the National Computing Centre, the Engineering Industry Training Board, and other organizations concerned with computing education.

Looks good on paper . . .

Hull University may yet claim its first Chancellor of the Exchequer. It would be Mr Roy Hattersley MP, BSc (Econ) 1956 from Hull and deputy leader of the Labour Party.

Such a scenario was highly likely, predicted Mr Hattersley at the conferment of his honorary degree at Hull recently. Who could be a better qualified chancellor than a qualified economist? Well, lots of people judging by Mr Hattersley's account of his educational experience at Hull: "It was here that I first read *Brideshead Revisited*, *The Mill on the Floss*, *Pinnefs Finn*, *Lucky Jim*, *Sons and Lovers* . . ." he said at the ceremony, " . . . and a couple of economic textbooks, the titles of which I have now forgotten."



Investigating private proposals

The threat that tuition fees might be re-introduced for Australian universities and colleges has hung over our heads for many years now. University and college education has been free since 1974, but governments both Liberal and Labor have made a series of attempts to reintroduce fees. Both attempts by the Fraser Liberal government failed, and it seemed safe when Labor, with its positive no-fee policy, came to office in 1983. We have since discovered however, that the Hawke government has us had a record of breaking pre-election promises, if not worse, than its predecessor; tuition fees have been no exception, notwithstanding that a policy of opposition to tuition fees is still part of the Australian Labor Party's official policy platform.

Earlier this year the various post-secondary institutions and staff organizations rallied to prevent a move which would have seen fees introduced in 1986. The lobby was successful, but only pro-tem. The minister for finance, Senator Peter Walsh, has made it abundantly clear that the question of fee reintroduction for him is not one of if but merely when. He is now apparently getting the groundwork done within the party to ensure that the fee policy is changed at the 1986 Labor Conference; from there it will be an easy ride towards budgetary moves to have fees introduced for the 1987 academic year.

But now the fee issue has become over-shadowed by the broader question of "privatization". In simple terms, this involves the selling of tertiary education, either by new private institutions established in Australia or by existing public institutions, to foreign students either in Australia or overseas. A recent government trade mission, after visiting six countries in southeast Asia, concluded that the market for exporting Australian tertiary education is potentially lucrative, and has given a green light for any such proposals by Australian institutions. Even before this mission was mounted, however, several "privatization" proposals had come to light, and some seem likely to succeed.

The Federation of Australian University Staff Associations has taken a clear policy line against the privatization of higher education. It has argued against the creation of private universities on the grounds that this will introduce into the tertiary education sphere the bitter wrangling that now exists over government funding of private schools.

The FAUSA believes that it is inevitable that private tertiary institutions, once founded, will eventually be successful in obtaining federal funding assistance, to the detriment of the existing public tertiary education system. Even if such institutions are established in the first place for foreign students only, it seems equally inevitable that a case will be made, again with success, for local fee-paying students to enter.

Some "privatization" proposals are quite hair-raising. The latest one to come to notice is at Deakin University in Victoria where in a few weeks' time 120 Indonesian students will arrive for a two-year BEng course. Staff at Deakin, have raised several questions about the implications of the proposal not only for academic standards at Deakin but also for staff conditions, given that the teaching timetable may involve contract hours of between two and four times the usual load.

Les Wallis

The author is general secretary of the Federation of Australian University Staff Association.

Science 'needs extra £200m' CATE rolls

by Peter Aspiden

The new rector of Imperial College, Professor Eric Ash, has urged the Government to pump in extra £200 million into the university science budget to maintain the viability of long-term scientific research.

The present vote of about £500 million was clearly inadequate and was forcing spending cuts on alpha projects in institutions all over the country, he said.

"The kind of economies which the present science vote forces upon us, such as the unfunded alpha projects, such as our need to reduce our spending on fundamental particle physics at the very time when that subject is proving so exciting - these are economies which we cannot afford," he said. "The pressures on government, any

government, to provide are enormous. Even so, the case for the science vote is of overwhelming importance. Just because so much of the rest of the country's prosperity, in the broadest sense, is inextricably tied up with the fate of science."

The case of outstanding researchers and lecturers being turned down for funding by research councils was a double tragedy. "It is tragic in the discouragement which it heaps on an outstanding talent at the start of their career, it is tragic because the nation loses the creative energies and the potential research successes which that individual might have been able to contribute."

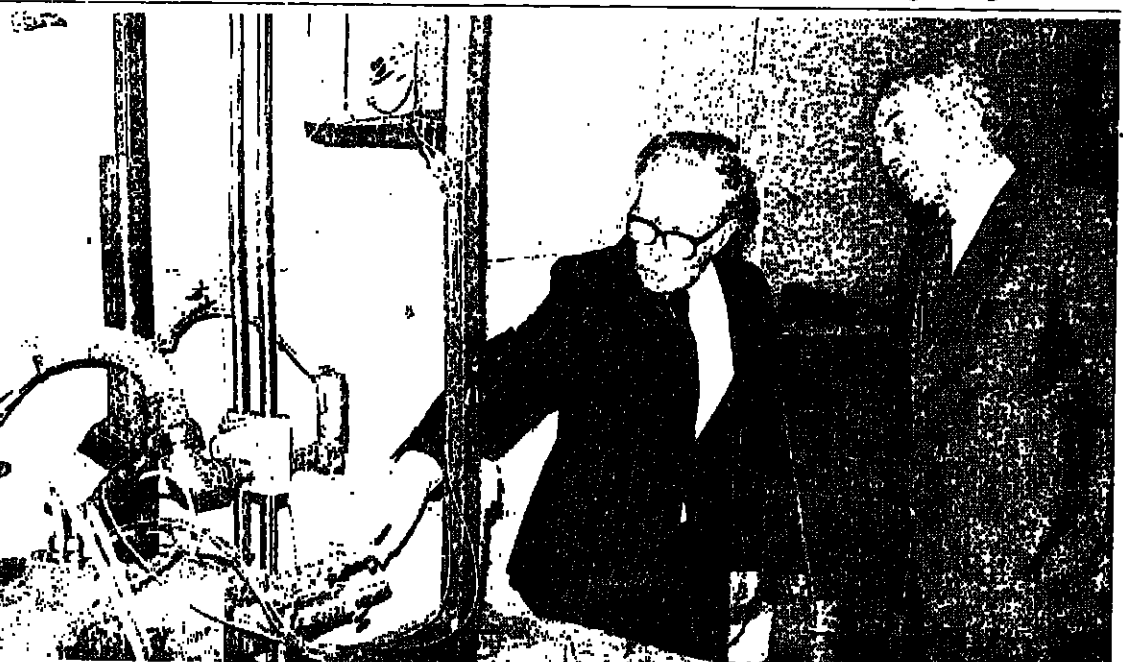
Professor Ash said that the applied sciences and engineering could benefit greatly from the closer working relationships between higher education

and industry, but added that it was much harder for the pure sciences to obtain industrial support.

"Times are hard - but they are not so hard that science for science's sake, science as an expression of man's curiosity about nature, should cease to flourish."

He wanted to increase the proportion of women at Imperial from the present figure of 17 per cent to at least 33 per cent. "The total absurdity of having such a small fraction of female talent devoted to science and engineering is an eccentricity which we simply cannot afford any longer," he told graduates during the college's commemorative day ceremony.

He urged graduates - particularly the women - to visit schools and "tell them about the excitement of a career in science or engineering".



Returning a favour - Mr Frank Courtman (left), a 58-year-old redundant executive, asked his former tutor at Manchester University to open his new factory, as a thank-you for the encouragement he received from a university career change programme. "I really thought I was on the scrap-heap, but the course made me look at myself through other

people's eyes and reassess everything," said Mr Courtman. His tutor, Mr Norman Page, senior staff tutor in industrial studies, said the course's computer programme had suggested self-employment to Mr Courtman, who responded with enthusiasm. The new company, Ultrabond Limited, will manufacture building chemicals.

AUT claims progress in waiver clause battle

by David Jobbins

Union leaders are claiming significant progress in their campaign to stop universities depriving contract research staff of legal protection. The Association of University Teachers says its efforts to persuade universities to drop their insistence that contract staff sign away rights of access to an industrial tribunal for unfair dismissal and to redundancy pay are showing signs of success.

A report to a meeting of AUT contract research staff next week will say that the list of universities which do not require staff to waive either right has grown to 32. Some of these have never used waiver clauses but there is an increasing number where local AUT negotiations have led to abolition or modification.

Green Paper criticism grows

The Association of Polytechnic Teachers has accused the Government of making up its mind before consulting other bodies on the future shape of higher education.

The Government's Green Paper on higher education, purportedly consultative, in fact has most of its major parameters fixed, according to the APT's national chairman, Dr Bruce Davison.

In a letter to the Secretary of State for Education and Science, Sir Keith Joseph, Dr Davison asks for an assurance that controversial areas such as the differential funding between universities and the public sector, the binary line, and pressure on the public sector to increase part-time and sub-degree provision, are truly open for discussion and "radical amendment in the light of the evidence presented".

APT evidence says the difference between university and non-university funding is not justified, while the disparity in spending on scholarship in the two sectors means the public sector is made less attractive to external finance and students.

The Green Paper recognizes the lack of public understanding of the polytechnics, but appears to close the door on discussion of the reasons for this or action on it, the APT says. An example is the "switch" of funds and places to technology, which by attracting students away from cheaper public sector places has been a "disaster", the paper says.

The chairman of Strathclyde University's court has also condemned the Green Paper, accusing the Government of "destroying our intellectual capital at the very time when our oil capital is beginning to drain away".

Dr Gavin Boyd, addressing a meeting of court and university guests, said the Government and its advisers were fundamentally wrong in three vital respects. Their policy was driving Britain inexorably over the economic precipice.

"They are not showing anything approaching a realistic attitude to the demand for higher education in high technology," said Dr Boyd.

ments. They are Belfast, Bristol, Lancaster, Leeds, Reading, Exeter, Ulster, Sussex, Bradford, City, Manchester and St George's.

Warwick alone has dropped the unfair dismissal clause, and the AUT identifies further institutions where negotiations on the redundancy payments waiver are continuing.

At Bath there is outline agreement on the clause's abolition for the second and subsequent contracts. At Bradford, the university is prepared to remove waivers on contracts of more than three years, or the redundancy payments requirement where staff have supernumerary employment of three years or more.

At Cardiff there has been agreement to recommend abolition of both waiver clauses, while at Essex the AUT understands the university is prepared

Lawyers charged with review

A review of Scotland's diploma in legal practice is to be launched this week. The diploma, a prerequisite for anyone intending to practise law in Scotland, was set up five years ago by the five universities with law faculties, Aberdeen, Dundee, Edinburgh, Glasgow and Strathclyde.

The working party conducting the review is chaired by Professor Campbell Burns, chairman of Strathclyde University's law school, and is made up of representatives from the five universities, the Law Society of Scotland, the Faculty of Advocates, and the Scottish Young Lawyers Association, a pressure group of law students, trainees and newly qualified lawyers.

It has been set up by the joint standing committee on legal education in Scotland, which represents the universities and the two professional bodies. The diploma is intended to give prospective lawyers a better preparation for working life, with a year spent concentrating on

to drop the redundancy payments waiver.

St Andrews' court has agreed to negotiate on the redundancy payments waiver. Sheffield is prepared to remove it after six years, and Southampton after the second contract. Stirling has offered abolition on renewals of contract, while York has already agreed to meet redundancy payments for contract staff on University Grants Committee funds.

AUT assistant general secretary Tina Day said: "The campaign is an undoubted success and we have moved the figures considerably. We anticipate more successes will be on the way and the tide has definitely turned."

But she said it was curious that universities should show themselves ready to negotiate over redundancy payments but not unfair dismissal

practical subjects after a three or four-year law degree.

The working party is to send questionnaires to the past five years' diplomates and to law firms who employ them, asking how well the diploma has equipped them to deal with real clients and real problems.

The current review, expected to produce a consultative paper on responses early in the new year, is intended as an educational evaluation.

However, there has been widespread concern over the Scottish Education Department's imposition this summer of grant quotas for the course, removing the former guarantee of a grant to students offered a place.

It seems that all those eligible for a grant this session have eventually received one, but the SED has hinted that there will be fewer grants from next session onwards.

comes under fire

by Owen Surridge

Anxiety about how the Committee for the Accreditation of Teacher Education is doing its job was very much the force at a conference of the Society for Research in Higher Education in London last weekend.

The conference criticized both the rigid attitudes displayed by the committee in interpreting its own criteria and its refusal to negotiate where colleges felt matters of institutional honesty were involved.

Mrs Pauline Perry, the Department of Education and Science chief inspector for teacher education, commented that members of Her Majesty's Inspectorate had been surprised by the hard line taken during committee discussions over matters not originally intended to be taken so literally.

Dr Ivan Reid of Leeds University school of education, said the introduction of the committee, without providing colleges with funds to implement its recommendations, was a questionable enterprise.

People had always been concerned about the quality of teachers and their education, he said, but the scene was informed more by opinion than by research. The CATE criteria stemmed from that tradition and could exclude candidates whose academic study lay outside the present school curriculum.

He accused the committee of demanding previous relevant academic studies and personal qualities before admitting student teachers to training, a demand, he said, which was "dangerously close to assuming that teachers are born rather than made".

Dr Reid was indignant about the committee's attempt to rule by edict and a bureaucratic rule book. In a speech of great contrast Mrs Perry spoke of the widespread speed and enthusiasm with which the new system was being implemented, of the unity and understanding it was bringing to both sides of the profession. His reaction to the criticism of Dr Reid and the outcry from the audience was of hurt surprise.

Israeli students strike over fees rise

from Benny Morris.

JERUSALEM

Israel's universities failed to open last week for the new academic year as students went on strike to protest against the major increase in tuition fees.

The fees are up to US\$1,150 per annum from last year's \$500. During the summer, students reluctantly agreed to an increase to \$900 as part of the treasury's attempt to increase revenue and cut state subsidies in all areas. But the government, linking tuition fees to the increased cost of living, pegged the rate at \$1,150. The average net wage is \$300 - \$350 a month.

The treasury provides 60-70 per cent of the universities' budgets, and with Israel in the throes of a major recession, is trying to impose an austerity budget across the board.

Kenya ponders national service to quell unrest

by John O'Leary

The Kenyan government is considering making a period of national youth service a permanent requirement for intending university students, Professor Jonathan Ng'eno, the education minister, said last week.

In an interview with *The THES* during a visit to Britain sponsored by the British Council, Professor Ng'eno declared himself pleased with this year's experiment, designed to cope with the backlog of students created by the year-long closure of the University of Nairobi, and to instil discipline and prevent further disturbances.

He said: "We are thinking about whether to institutionalize it so that we

do not have to worry about catching up the last year. But we remain flexible if the educationists find a need to make up that year."

The 2,700 students accepted by the universities this year spent a month at one of two training camps, largely undergoing a military drill course. The scheme was not a popular innovation with the students, some of whom burned their uniforms when asked to surrender them to the college authorities, at Kenyatta University College.

Proposals to make national youth service compulsory for university students first surfaced in the early 1970s but were dropped. The scheme was introduced initially to cater for party activists who had no basic vocational training at the time of independence.

Professor Ng'eno hoped that legislation to decentralize the administration of the university, giving the six colleges their own heads, would help prevent further unrest by dealing more directly with students' problems.

The creation of two more universities - Kenyatta for education and Moi for science and technology - was also helping by encouraging competition between the institutions. "The universities all want to be seen as disciplined and not resorting to rioting," he said.

Moi University is to be inaugurated by the President, whose name it bears, in December, when the first graduates receive their degrees. They began their courses in forestry at Nairobi before the faculty was transferred. Courses in information sciences will be added

next year as part of a long-term plan. The Kenyan government is still seeking to raise the money to complete the development of Moi from overseas aid. Professor Ng'eno's visit, his first to Britain, included a session at the Overseas Development Administration, although this was not primarily concerned with the university.

He also visited Thames and Newcastle Polytechnics, Leeds University and the University of London Institute of Education, all of which have link programmes operating in Kenya. He met Sir Keith Joseph, Secretary of State for Education and Science, and stressed his government's concern at increases in course fees in Britain. Kenya is the second largest sender of students to this country from overseas.

Nor was he too impressed by the surveys finding that faculty were generally depressed by the ill-preparation of their students, and that two thirds of them mistrusted their administrators. In spite of all, Dr Boyer claimed, professors still preferred their job to working in the private sector.

Survey shows loss of US morale

from William Norris

WASHINGTON

Morale among faculty on the campuses of America seems to be sinking fast. According to a survey conducted by the Carnegie Foundation for the Advancement of Teaching, 36 per cent of university staff say they may leave the profession in the next five years.

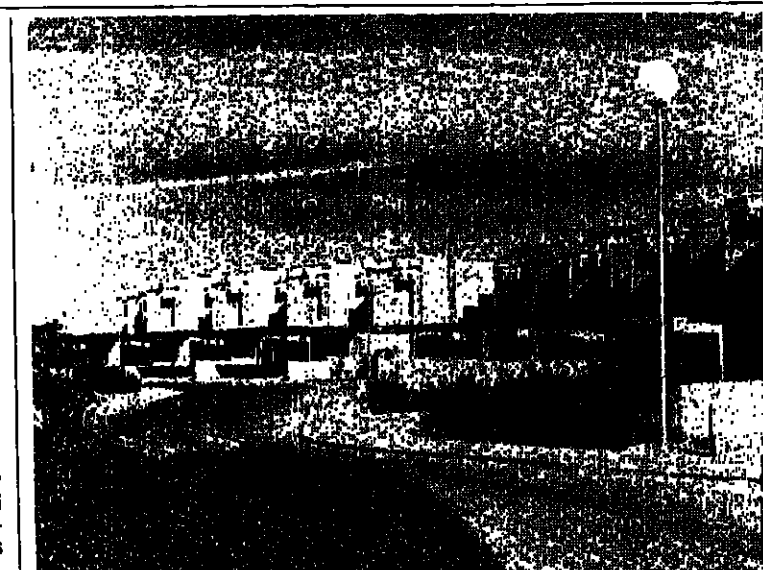
Twenty-one per cent of the 5,000 faculty members questioned said they would not choose teaching as a career again, and 40 per cent said morale was worse than it was five years ago. Sixty per cent described their salaries as "fair" or "poor", and 75 per cent said pay had not kept up with inflation.

However, according to Ernest Boyer, president of the foundation, all this does not imply an imminent mass exodus of professors, but merely "a mood of restlessness and frustration".

"Many faculty who came into the profession 10 to 15 years ago are now frustrated by the lack of mobility to ascend the academic ladder, obtain tenure and move from campus to campus," said Dr Boyer.

A third of those who answered the survey said they believed abolishing tenure would improve higher education - a view which elicited the somewhat cynical response from Dr Boyer that those concerned might be faculty who had not obtained tenure.

Nor was he too impressed by the surveys finding that faculty were generally depressed by the ill-preparation of their students, and that two thirds of them mistrusted their administrators. In spite of all, Dr Boyer claimed, professors still preferred their job to working in the private sector.



Staff building on the Sultan Qaboos University, Oman

Gulf state's new university will be opened next year

from Christopher Horsey

OMAN

Oman's Sultan Qaboos University is due to open its doors next year on a schedule in highly impressive buildings, relying on traditional Islamic design.

The site looks towards Mecca, and much care has been taken in the construction of a university mosque, with inner and outer halls large enough to take 2,000 people at prayer.

Education has been a high priority of Oman's ruler, Sultan Qaboos, since he took over in 1970. Then there were no girls' schools. Lad primary schools for boys were rare. The literacy rate in 1980, after a free system of primary and secondary education had been established, he announced his decision to build a university.

The aim was to create a university which would train Omanis to develop the skills they would require in present day Oman society. It has meant the establishment of departments of science, engineering, medicine, agriculture, and Islamic studies. In the early days of the university there will be no teaching of the humanities, but space is reserved for the building of

additional departments at a later date. A teaching hospital is being built adjoining the university site, and when completed in 1988 will be closely integrated into university life.

The secretary general of the project, Sheikh Amer Ali Amer, who has played a very important role in the planning stages studied at London University's Institute of Education in the late 1940s. An urbane, precise and thoughtful man, he has visited universities in the United States, Britain (Oxford, Cambridge, York and Nottingham), France, West Germany, Australia, New Zealand, Pakistan and, of course, the Arab world. He has gathered ideas and impressions, but he insists there has been no attempt to copy other systems. He is being widely appreciated as the university's first vice-chancellor.

He insists that a university should not be looked at purely as a place of learning. "At a residential university," he says, "campus life is of great importance. We are training character and training for life."

Asked why there was twice as much male as female accommodation he replied that this figure reflected the school population in 1980 when planning began.

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overseas news

UN urges new technology awareness

By Thomas Land

The widespread use of micro-electronics in the developed world demands a huge effort by governments to adapt educational and training systems to the changing manpower needs of industry says the International Labour Organization of the United Nations.

The rapidly widening use of new technologies results either in the replacement of old qualifications by new ones or the combination of traditional requirements with new needs.

The ILO calls for training programmes to promote increasing occupational flexibility which allow adaptation to changing manpower demands.

"Education and training schemes need to convey a range of basic and general skills on which new ones can be built and further developed," advises the study paper *Integration of Youth into Working Life*. It surveys and

emphasises the importance of steps taken so far to promote computer education in schools and universities, and examines the problems encountered by training and re-training schemes in adapting their methods and curricula to new needs.

Training delivery must become more flexible, the study urges. It recommends the adoption of shorter courses that can be set up, expanded, contracted or revised in response to variations in demand.

And if such flexibility is to be attained, the paper says, educational and training institutions everywhere must learn to collaborate permanently with labour market authorities. In many countries, large enterprises already equip themselves with their own training services, and many universities in Northern Europe include labour market representatives on their boards of controllers.

The study projects "a profound change in the role of work in human life" brought about by the new technologies. It warns against the risk of job losses and the intensifying polarization of workers divided by a widening gap of skills and remuneration. The study suggests that proper educational planning initiated at the highest level could at least qualify the trend.

An ILO specialist says that "a broad basic education in which a solid general initiation to the spirit and methods of science is very much to the fore, will be a valuable asset for future members of the active population who are called upon to work with the new technologies."

"As the most important skill in an automated process becomes personal reliability, the general level of education will be a very relevant factor enabling the worker to comprehend the limited processes under his control

and preparing him for successive training and re-training necessitated by constant technological change."

The report notes that young people entering the labour market already face a widening mismatch between available training and jobs on offer. The current shortage of computer programmers and software specialists in Britain, West Germany, Switzerland and Japan is slowing down the diffusion of micro-electronics.

The basic structure of employment is changing rapidly under pressure from the new technologies. In addition to a continuing decline in industrial employment worldwide, the report observes stagnation in the supply of public sector service jobs. By contrast, certain sectors of the "quality of life" field such as health and recreation as well as business services are developing steadily.



Penderecki: "wasted years"

Penderecki hits out at reforms

Krzysztof Penderecki, the eminent Polish composer, has strongly attacked the recent Polish higher education reform.

In an interview broadcast on the Polish service of the BBC last Sunday, Penderecki said that while the reform "against which we all fought" was passed in July, he felt that his 11 years' service as rector of the Krakow Musical Academy were wasted effort.

The reform, which Penderecki characterized as "absolutely new to education", is intended to bring higher education under closer government control, and the election of rectors (one of the main features of the liberalized higher education act of 1982) will become simply a choice between two government nominees.

"After all my work," Penderecki said, "someone will simply come along and spoil it." Penderecki's attack was all the more surprising in that it was he who raised the issue. The main part of the interview was devoted to a discussion of Penderecki's own musical career, with special reference to his new *Polish Requiem*. The interviewer intended to conclude with a few general remarks about the rising generation of Polish composers and musicians.

Penderecki, however, took the question as referring to the broader aspects of musical education, and only when he had said his piece about the reform could he be induced to speak about the present poor career outlook for young musicians in Poland.

There is talk of the Pell grant programme being slashed by 15 per cent, stopping aid to 438,000 students, and of 900,000 students being denied access to the supplemental education opportunity grant and the college work-study programmes. Research budgets would be slashed.

Lawrence Zaglad, of the American Council of Nutrition, said: "This proposal is very serious. It could be a very near disaster for higher education."

But the problem for American academics is that the proposal is seductively attractive for politicians with an election year fast approaching.

They can tell the electorate that they are really doing something about a budget deficit which has even begun to worry a credit-happy society - and if higher education gets lost in the rush to popularity, professors can expect no more than an apologetic shrug.

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Why the backroom boys are on the defensive

Jon Turney examines the developing links between civil and defence research and development

ogy Enterprises, has just been launched to promote commercialization of spin-off products from defence research. The middle-man the defence staff call ferrets are already at work in three labs - the Royal Signals and Radar Establishment (RSRE) at Malvern, the Royal Aircraft Establishment at Farnborough and the Admiralty Weapons Establishment - looking for suitable candidates. The aim is to make sure overseas companies don't scoop the benefits of British defence-inspired discoveries, as they did with cloth made from carbon fibre, liquid crystals for electronic displays or silicon-based integrated circuits.

A second incentive to opening the doors is the problems of staffing military establishments. Take the RSRE at Malvern, regarded by Colin Fielding, who worked at Malvern for a time as director of the Atomic Weapons Research Establishment at Aldermaston describes the Wiltshire's lab as "a mecca for every like-minded scientist in the Western world".

But Mr Fielding told journalists visiting Malvern recently how the technical attractions of the scientific environment in a lab renowned for its work in electronics, signal processing and imaging, are losing their lustre in competition with industrial salaries.

The resulting brain drain causes severe management problems for the MoD mandarins.

These are complicated by the overall government policy to cut civil service numbers. This applies to the MoD even though it has been exempted from public spending limits felt keenly elsewhere - and the 29,000 research staff in the ministry's pay in 1978 have now come down to 22,000 with a 6 per cent annual decline set to continue.

Small wonder then the ministry is eyeing the universities more sympathetically as research partners. And the shift to academic collaboration may be clinched by a third factor which is more powerful still - the central

importance of high-technology in military plans for new generations of weapons.

Military planners are now less concerned about the shape of tanks, ships or planes and more worried about the black boxes which control their guidance, tracking and communications systems. According to Colin Fielding, "progress in electronics will be the pace-setter for any quantum improvement in defence systems".

This puts Malvern at the centre of British defence research. But it also makes the work there much more like research and development now under way in civil laboratories, whether academic or industrial. Increasingly, the core research for high-tech innovation in civil and military spheres is closely related - new semiconductor materials, software engineering, communications, sensors.

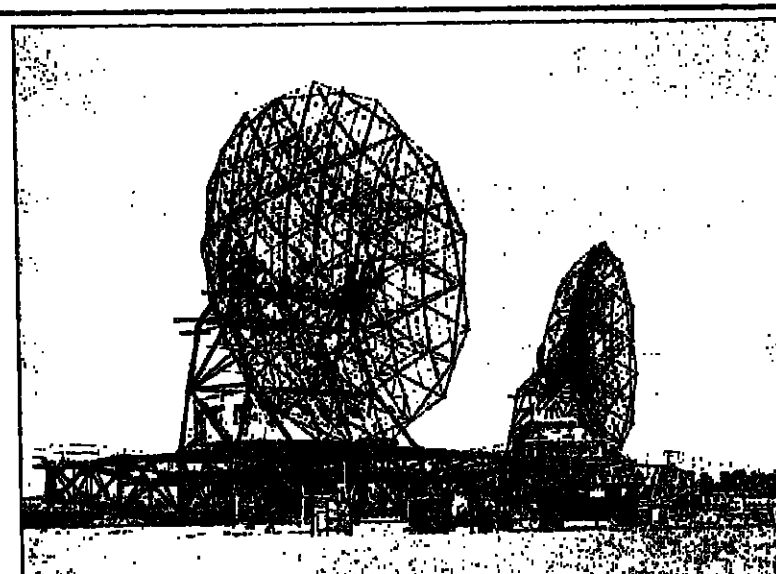
There is still room for debate over whether the demands of the defence sector will set standards which are any help in making marketable products for civilians - or contribute to further relative economic decline as some analysts argue they have since the Second World War. But if industry doesn't need the expertise of military researchers, the MoD certainly wants access to new civil research.

This can be seen in increasing defence involvement in joint research programmes now springing up as Britain's patchy effort to co-ordinate science policy is extended. The MoD is putting £40 million into the five-year Alvey programme for advanced computer research, and has been repaid with charges that it is taking over the programme for work it would have done anyway in software engineering and chip research.

The ministry is also a partner with the Department of Trade and Industry in the smaller Joint Opto-electronics Research Scheme, and will play a major role in management of the forthcoming national space centre, expected to be sited at the Royal Aircraft Establishment, albeit outside the security fence.

In the universities, future MoD involvement will build on the contacts established through the ministry's present modest £9 million a year spend on academic research contracts. These cover around 650 separate agreements at the moment, and already provide a substantial income for a few centres.

Cambridge University, for example, had more than £350,000 worth of British defence contracts in 1983/84, covering work in subjects like



Radio interferometer aerials at the RSRE, Malvern.

oceanography, engineering, metallurgy, and physics, with a heavy bias toward materials research.

The ministry also has members or observers on a number of SERC committees, and these reveal an interest in marine technology, solid state physics, materials processing, lasers, applied mechanics and physical chemistry.

These are in line with the areas where academics may hope to attract support under the new joint research scheme under which the defence bankroll will cover half the cost of grant proposals sent to the SERC in subjects with military application.

Researchers who hope to qualify will indicate their interest in MoD support on application to the SERC and the ministry will then vet the projects before they go before council peer review committees. Around £5 million will be spent this way on academic side - next year mainly through the SERC although some work backed by the Natural Environment Research Council may also be included - the scheme will be launched next month.

This still looks a small initiative set alongside the £700 million-odd the ministry will spend in its own establishments next year, but MoD officials indicate there is room for expansion if the trial is successful. That judgement will rest partly in the hands of other academics for the MoD's advisory apparatus also draws on university expertise. The current chief scientific adviser, who chairs the crucial Defence Research Committee is the York University chemist professor Richard Norman. Other academics serve on the Defence Science Advisory Council, chaired by Professor John Cadoogan, chief scientist at EP and ex-chairman of the SERC's science board.

They and others in the ministry will be keeping a close watch on the joint grants scheme, and on moves to encourage more joint work on defence between universities and industry.

Looking further ahead, ministry officials say there may be possibilities for joint use of large facilities, and even for joint planning of new facilities. This has not yet moved beyond the stage of exchanging lists of possibilities, and may be hampered by the fact that the SERC, for example, has no current plans for large new capital investments. But the MoD may well find that there is scope in areas like oceanography where it has ready access to ships for experimental platforms but the research council community may be stronger on theoretical work.

In any case, such discussions show the extent of the MoD's interest in closer links with civil science. There could even start to follow more closely the model of the Defence Advanced Research Projects Agency (DARPA) in the United States - which has long had a large programme of directed research in the universities in such areas as artificial intelligence - though not on the hundred-million dollar scale of the US agency.

British defence planners could even find themselves competing with US contractors for British researchers if the US Strategic Defense Initiative "star wars" programme goes on expanding. The scale of the research needed to realize the US schemes for anti-ballistic missile systems is likely to outrun the number of people able, or willing, to work in this area at home, and US officials have already made approaches to some British university groups.

US doubts about security may discourage extensive use of overseas contractors on the most sensitive parts of the programme, but there is still likely to be work for European researchers in the overall scheme. Either way, British university scientists look set for a closer relationship with the defence community.

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Professor in book deal with CIA

Writing books can be an unrewarding occupation, as many a writer can testify, but a revelation by the *Boston Globe* shows that it all depends how you go about it. The *Globe* has been raising a few envious academic eyebrows with its disclosure that a Harvard professor has been paid \$107,430 by the Central Intelligence Agency to research and write a book on Saudi Arabia.

The author concerned is Professor Nadeau Safran, Egyptian-born director of Harvard's centre for middle eastern studies, who was contracted to write the book in 1982. The *Globe*, which had obtained a copy of the contract, noted that the finished product contained no reference to the fact that it had been produced with CIA funds.

The book, *Saudi Arabia, the Ceaseless Quest for Security* was published last month by Harvard University Press. Now the affair is under investigation by the dean of the faculty of arts and sciences.

In the mid-1970s a congressional inquiry disclosed that the CIA had arranged for the publication of hundreds of books as part of a worldwide propaganda campaign. Apparently the practice continues. "I don't think it's what you would call secret funding," an agency spokesman said blandly.

Nor is this the only cause of embarrassment to Professor Safran this week. It has also been revealed that he was paid \$45,700 by the CIA to sponsor a conference on Islam. This would have been permissible, provided he had told Harvard about it, and followed the rule that he should share the fee with the university. Unfortunately he did neither, claiming that he had arranged it himself and not on behalf of the centre for Middle Eastern studies.

The dean, Michael Spence, said this week: "I have concluded that Professor Safran erred in not following the relevant rules in regard to sponsored projects, and I believe he agrees with that conclusion." The professor, however, could not be contacted to confirm if this was so. In keeping with his sponsorship, he was nowhere to be found.

Aid for parents

East Germany has increased its financial support for students who have children of their own or are the legal guardians of children.

Full-time university and college students in this category will receive an additional 60 marks per child per month in addition to their basic grant.

East German demographers have, for many years, been extremely concerned about the falling birthrate, which is below replacement level, and which is particularly evident among young couples with tertiary education.

The Alice-in-wonderland world of America's education budget

From William Norris WASHINGTON

For those accustomed to the British Budget, with financial resolutions whipped through the Commons in a day and a Finance Bill no more than a long-winded formal endorsement of the Chancellor's whims, America's way of raising money is a mind-boggling experience - and no more so than this year, which has seen funding for higher education kicked around like a football.

It all began in the early spring, when the administration determined to cut billions from the student loan programme, and the academic community storming the lobbies of Congress in righteous fury.

The ill-chosen words of education secretary William Bennett then on the subject of student excesses sound even sillier now, but they are being eclipsed by the strange gyrations of Congress - and there is still no budget for 1986.

Committees have laboured and brought forth strange and contradictory offspring. One would cut spending on student loans by \$800 million over three years, another would spend billions on the same programme, yet another would increase the amount students can borrow and consolidate their repayments.

The House of Representatives, controlled by the Democrats, pay some attention to President Reagan and

trims the guaranteed loan programme to \$2,700 - whereupon the Republican Senate appropriations committee promptly increases it to \$3,300.

Now they must compromise, and face the possibility that if the president does not like the result he may veto his own party and support the opposition.

But it did seem until recently that the whole mess might be about to reach some sort of conclusion. The new fiscal year was due to begin on October 1, and it was generally thought that, although Congress lacked a snowball's chance in hell to finish its work by the deadline, they would at least do the decent thing and pass a continuing resolution to preserve the status quo.

Alas for sanity - tied to the Bill which would enable the US government to borrow enough money to save it from the embarrassing state of going broke was an innocent little amendment which insisted on a balanced budget by 1991.

President Reagan - who will not be there in 1991 - rather liked this simple solution to his perennial deficit problem, and smiled upon it. The Senate took a deep breath and passed it. The House of Representatives agreed to talk about it. The academic community - which had thought itself safe - stood aghast. For the balanced-budget plan, which requires the federal deficit to be trimmed by \$36,000 million annually over the next six years,

provides for across-the-board cuts to be made automatically if Congress and the president fail to agree. On present form, nothing seems more likely, and those automatic cuts will hit education very hard indeed.

Higher education lobbyists are complaining that the mere threat of cuts being imposed on the guaranteed student loan programme will be enough to persuade lenders to stop offering the loans to students, and even if a loan is granted for one academic year, there is no certainty that it will be extended for the next.

There is talk of the Pell grant programme being slashed by 15 per cent, stopping aid to 438,000 students, and of 900,000 students being denied access to the supplemental education opportunity grant and the college work-study programmes. Research budgets would be slashed.

Lawrence Zaglad, of the American Council of Nutrition, said: "This proposal is very serious. It could be a very near disaster for higher education."

But the problem for American academics is that the proposal is seductively attractive for politicians with an election year fast approaching.

They can tell the electorate that they are really doing something about a budget deficit which has even begun to worry a credit-happy society - and if higher education gets lost in the rush to popularity, professors can expect no more than an apologetic shrug.

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Crackdown on 'fake' colleges

Chinese provincial governments and education bureaux are cracking down on a number of private polytechnics and colleges up and down the country, which have been set up without state approval.

According to circulars issued by provincial governments and education bureaux such institutions are illegal and degrees and diplomas awarded by them are invalid. Teachers have been told not to accept posts and students not to enrol or pay fees without first establishing that such institutions have been granted government approval.

Reports submitted to the State Education Commission and provincial governments have been highly critical of the conduct of many newly established institutions, describing them as "fake colleges" and alleging that many of them were set up purely for the purpose of making money and were quite unconcerned about educational standards and ethics.

Any student is accepted provided he or she can pay the tuition fees, which are usually above the rate set by the state. It was also reported that many students received degrees or diplomas without having completed proper courses.

Investigations were carried out after the conduct of certain colleges had provoked complaints from students. The number operating around the country was not disclosed.

Hopeful travellers feel that it's time they arrived

A prophet is not the only one to be without honour in his own country - travelling professors do not fare too well, either. At least, that is the complaint of the Fulbright Alumni Association, whose members wing their way to 100 or more foreign countries every year.

The Fulbrighters are angry. They set off on their international exchange visits full of enthusiasm, spend 12 months in earnest study, and return to America with learned reports on the culture and politics of their host countries - only to find that no one wants to know.

So low in profile have the Fulbright scholars become that even their own country spends much of its time trying to track them down. Some 40,000 Americans have received awards since the programme started in 1945, but only 2,850 belong to the alumni association.

Indignation flared freely at the association's recent annual meeting in Arkansas. "When people come back from a Fulbright year in a country, they know more about the people in that country and their culture and language than anyone else," said Michael Cardozo, who has twice been to Belgium. "The nation is not taking advantage of that knowledge and understanding."

Ms Jackson, who is now personnel director for an Arkansas public school system, said: "We need a certificate on the wall to say 'I was a Fulbrighter'. Men have their Rotarian things. I am proud of being a Fulbrighter. Fulbright makes a difference, but it's no more to hang on the wall."

It didn't seem much to ask.

Clampdown on nepotism

Soviet officials who "violate party ethics and duties" by trying to ensure preferential treatment for their sons and daughters in higher education are liable to face severe penalties under the reforming regime of Mr Gorbachev.

A recent scandal involving admissions to the faculty of medicine in Tbilisi ended in the dismissal of Mr R. Surmanidze, minister of health of the Adzhara Autonomous SSR, a part of the Georgian SSR.

As well as losing his job, Surmanidze was expelled from the party, and severe party reprimands were imposed on several other officials, including a deputy premier of the Adzhara SSR.

It appears that the young people involved had apparently given false information on their university application papers about their place of residence and education, thus enabling them to take advantage of loopholes in the admission regulations and bypass the entrance examination. Positive discrimination procedures for minority nationalities seem to be involved.

Such a false declaration would require the connivance of a number of officials.

Maggie Richards interviews Ian Benson who takes charge of Britain's penal education system next month



Today Ian Benson takes on what must rate as the most unenviable post in the British education system. He will assume responsibility for an education service surviving for the most part in overcrowded and outdated accommodation; a staffing crisis over which he has no control; and a set of students whose needs range from basic literacy tuition to degree level studies.

Attach a criminal record to each student profile, and incarcerate a large proportion behind stout walls topped by barbed wire, and only then do you begin to perceive something of the task awaiting him at the Home Office as the new chief education officer for the prison service.

Anxious about the prospect he may be daunted by it he most certainly is not.

At 39, Ian Benson comes to the prison department direct from local education authority territory - currently he is inspector for adult education in Kent. Though his links with prisons via this route may appear tenuous at first glance, his history of involvement in the area is lengthy and impressive.

His interests in penal education pre-date a part-time MA at Sussex University, but he pinpoints this period of study as marking a watershed in his personal attitude.

Intent on conducting an in-depth investigation of a prison education

department in his final year of study, he then became fascinated by the relationship between the education service and the rest of the prison establishment, and at Maidstone he decided to concentrate specifically on this aspect.

There, he reckoned, he received his most revealing insight into prison life. Achieved not by involvement in the actual teaching of prisoners, but through a period spent solely in the company of prison officers, sharing their working life from the first-line up for duty through to the final steps outside the walls, and back into society.

It was, he believes, a vital experience, which firmly sets the role of the prison education service in perspective, and enabled him to measure its worth alongside the other facets of

confinement.

He is under no illusion that education can provide the overall panacea. Rather, the education service must ensure that it does its utmost to fulfil its role in relation to all those other facets of prison life.

Neither is he a subscriber to the view that prison officers, beleaguered both by inmates' overcrowding and chronic staffing shortages, represent a repressive antagonistic force opposed to educational provision. As the people most frequently in contact with prisoners, on the walkways and in the cells, potentially they represent a hidden outreach resource the education service might one day utilize, he argues.

The present problem, he feels, is largely one of misunderstanding by prison officers about the function of a

prison education department. Though not personally connected with the venture, he cites as an example of a positive response from prison officers, a summer school held at Maidstone for prisoners serving life sentences

Art man from Havana

No student radical's room was once complete without a silhouette poster of Che Guevara. That revolutionary image was designed by a Cuban exile who arrived in Britain 17 years ago and has been teaching art and design here almost ever since.

Tony Evora this year became head of the department of design at Oxford Polytechnic. But he was born in Havana, the younger of two sons of a carpenter and small shopkeeper who scribbled in sand both boys to a private school where they learnt English and were destined for a business career.

It was the older brother who started drawing, but the younger one who would not give it up: he started a diploma in graphic design in the evenings while still at school, sneaking out of the door with a bag apparently of laundry.

His mother, suspicious of this new obsession with clean clothes, accused him of seeing a woman. He told her and she kept the secret, so that his father only found out when he was invited to his son's final diploma exhibition.

The following year, 1955, Tony Evora left school. He worked in an office in the mornings, and in the afternoons studied fine art at Havana's Academy of Fine Arts.

But before he could receive his diploma in 1958, Batista, the Cuban dictator, fell and while the students anticipated the revolution, the academy - whose director had supported the old regime - was closed.

Evora found a dogbody job with the international advertising firm McCann Erickson in their Havana office. In early 1959 Castro arrived. One of the first things Castro did was to create a national printing house. Ignoring international copyright law - a position he has held ever since - he turned the handful of newspapers that had supported Batista into letterpress publishers churning out cheap editions of Marxist books, novels, poetry - all of which needed designing and pagination, done by youthful enthusiasts such as the 22-year-old Evora.

He left the advertising agency and joined a weekly literary section of a newspaper called *Revolucion*. At the same time, he was illustrating books and magazines, caught up in the wave of surrealism influenced art that swept the country with the revolution, determined to replace the old with the new, and eventually to become known internationally as Cuban graphics.

"It was a fantastic time: the whole atmosphere in the country was so positive, so dynamic," he recalls. "I would go with a poet to a tobacco factory. He would read a chapter, and I would show some of my paintings. A discussion would start there: someone would say 'I don't understand that; what's that for?'"

In 1962, Evora was sent to Prague for three years to study typography and printmaking. In his vacations, he travelled to Eastern and Western Europe. He came back to Cuba full of ideas drawn from the folk-art-inspired popular art of Eastern Europe - something that before the revolution had been unknown in the American-influenced and very underdeveloped art of Cuba.

Back in Havana, aged 27, he and other revolutionary artists were high-status cronies of the regime, attending regular briefings on new political campaigns which they not only illustrated but sometimes initiated. Evora was now art director of the national publishing house, working 16 hours a day producing books and posters.

With few modern printing facilities - lettering for screen printing was still cut out by hand - they made a virtue of necessity, developing a simple, direct, compelling visual style. The Guevara poster, which went through several versions, the first of which came out before Evora went to Prague, was typical of many others.

In 1968, he and his Czech wife took a rare holiday in Prague. While they were there, the Russians arrested Dubcek. The Evoras went to stay in a Bohemian village, near the East Ger-



One of the many variations on Evora's Che Guevara design

Karen Gold talks to exiled Cuban Tony Evora (below), now head of design at Oxford Polytechnic



man border. During the night, there was a knock on the window: their neighbours were telling them that Czechoslovakia had been invaded.

Three days later, they returned to Prague, with the intention of getting to Cuba as quickly as possible. Evora went to the Cuban embassy. There he read the Cuban papers denouncing Dubcek and welcoming the Czech "liberation". He walked straight out into the street again.

He joined the queues for visas at the Austrian embassy. Getting one, he waited another four days until Dubcek returned. If the Czechs were going to fight, he wanted to fight with them, he says. They did not. So he got on a train for Austria, thinking he would probably never see his parents, or his son in Cuba again.

All he had with him were his clothes and two boxes of photographic slides of his work. At the border the Czech soldiers searched him and left him the slides. Then the Russians searched him and confiscated them. He arrived in the West without a penny in his pocket or any evidence of anything he had ever done.

He earned a little money from freelance work, and stayed with friends in Vienna and Milan, from where he was removed after 10 days by Italian police who dumped him at the French border. He went to Paris, then in the throes of the 1968 riots. As he watched the police beating people up in the streets, he says, he wondered where this kind of thing never happened - and took a flight to London.

He arrived the day after the huge anti-Vietnam war protest outside the American embassy. "You're too late mate," the customs officer said to him at Heathrow. "You've missed the demonstration." "No," he said.

Evora. "You don't understand... Eventually he was allowed in.

While in France, a friend had brought him some smuggled examples of his work in Cuba, and he was able to show these to gain freelance work. He applied for a permanent job at Longmans, the publishers, and produced his Cuban book jacket designs at his interview. His interviewers were bemused, since the jackets were for books by Longman's own authors - Castro copyright piracy again. The situation was saved, Evora recalls, by a very British joke. One of them remarked that Mr Evora had clearly been "our man in Havana", and they took him on.

From Longmans he went into lecturing: first part-time at various colleges and polytechnics, then full-time at Exeter College, Newcastle Polytechnic, Maidstone College and now Oxford. His parents, brother and sister left Cuba too: his father is dead but the others all live in America. He would never join them, or what he describes as the Cuban counter-revolutionary community, he says.

But in Cuba his name has been erased from all records. The Guevara from every wall when he arrived here was recently supplied to American publishers by Cuba without crediting him. So he stays in England; still a romantic revolutionary, an enthusiast for the country he chose - though never fully adopted by citizenship - because it seemed so far from the violence of revolution and counter-revolution.

"I want the best for my people. I agree entirely with the first years of the revolution. Revolution is always a step forward for the people. And there are many things I disagree with here."

Giving birth to a more comfortable old age

Financial hardship was a harsh fact of life for large numbers of retired academics in the early postwar years. The first national pension scheme, introduced in 1913 after one of the periodic population explosions in the universities had its admirers right up to the formative years of the qualitatively and quantitatively different post-Robbins system of the mid-1970s.

Yet it left many university teachers and their families in a state of near penury. Roughly 80 per cent of members of that original scheme, the Federated Superannuation System for Universities, retiring after 1953 had to turn to a hardship scheme - a proportion which remained unchanged among members retiring in 1964.

The problem with FSSU was that it worked through the teacher taking out insurance through fixed contributions. The policies, offered by commercial companies approved by the FSSU, delivered unpredictable and highly variable benefits which would often be wildly out of line with actual salary levels in the final years of employment, delivering a financial jolt at the worst possible time.

The solution, offering greater financial security to pensioners and enhancing mobility within the system, was to base benefits on the salary levels enjoyed in the closing years of an academic career when they are normally at their highest.

But this was not a popular step either among the well established universities or with the FSSU itself. The preferred route in many quarters was to improve and develop FSSU.

One of the pioneers of what was originally called a terminal salary scheme (TSS) was Sir Douglas Logan, for 27 years principal of London University and the first chairman of what was finally named the Universities Superannuation Scheme.

In its 10-year history - it was inaugurated on April 1, 1975 - it has given thousands of academics indexed pensions (for which they and their employers have paid) while offering universities a heaven sent way of shedding up to 3,500 academics aged over 50 in the wake of the 1981 cuts - an actuarial jolt which will take the scheme an estimated 40 years to recover from.

In his own account of the tortuous birth pangs of USS, Sir Douglas makes clear he felt the time for tinkering was over as early as 1957.

He emerged a forceful midwife fighting through a protracted and awkward birth, finding time from the student troubles of 1968 and the financial problems of two London University companies to see his pet project through.

Sir Douglas steadfastly refuses to claim that without him USS would never have been a TSS. But he does say categorically that without his efforts there would have been no such scheme in place in 1975, thus earning the criticism in some quarters that his account approaches some kind of ego trip.

Are such criticisms fair? After disclaiming total credit for USS, he comments "I think I can legitimately be regarded as the mainspring of the undertaking."

But his recollections describe a pivotal role, intervening or taking the initiative at key stages to keep the TSS proposal alive.

After the Hale committee set out the relative merits of retaining FSSU or opting for TSS, it was Sir Douglas and

two colleagues - Sir Philip Morris, then vice-chancellor of Bristol, and R. A. Painford, bursar at Manchester - who stuck out against almost the rest of the system for TSS. His was a minority view even in his own university, but he and his supporters found strong arguments marshalled in their favour outside the formal structures of the universities themselves.

Apart from the UGC, which backed TSS, it came from the Robbins Committee in 1963 and in 1964 from the National Incomes Commission - both concerned to ease mobility of staff between the universities and the rest of the public sector.

Their intervention and the enthusiasm of the minority within the system for TSS led to the establishment of a working party under Sir George Maddex, a former government secretary, in September 1964.

It was the Maddex deliberations, principally during 1965, which dug the grave of FSSU and the foundations for USS.

Sir Douglas identifies two persistent difficulties - the Treasury's insistence that any scheme for benefits to dependents must be paid solely out of employees' contributions, and the view expressed by FSSU chairman Mr E. P. Weller that his scheme would prove a better bet for new entrants and that the need for bailing out pensioners was a passing phenomenon.

He ascribes this "on good authority" more to pressure from university finance officers on the FSSU executive than to Mr Weller's personal opinion.

"Moreover I suspect that the statistics he produced in support of his claim were prepared by a committee of the FSSU panel companies, scarcely an independent source, and were based on certain economic assumptions which some members of the working party, including myself, found difficult to accept, though on the thorny question of inflation they were in accordance with those of the majority of the working party."

The post-Maddex debate largely settled the issue of principle within the universities. In Logan's own university the majority of institutions, including the five largest schools, supported further investigation of TSS with eight small institutions dissenting.

Nationally, 19 universities (including Cambridge, Glasgow, Leeds, and Oxford) employing 32 per cent of full time academic staff, wanted to keep FSSU.

Seven institutions employing 7 per cent of staff were undecided, but 26 with 61 per cent of academic staff wanted the option of TSS explored.

The Committee of Vice-Chancellors and Principals which in 1961 had reported overwhelming opinion against TSS, agreed in 1968 that it would open negotiations with the AUT over a detailed scheme.

"The first major hurdle had been successfully jumped," Sir Douglas said.

But it was the prelude to more than six years of interminable negotiations with Government, overshadowed by the acute political debate over occupational pensions, before Sir Douglas could retire from London University to take up the chairmanship of his own pension fund.

David Jobbins

The Birth of a Pensions Scheme by Sir Douglas Logan, Liverpool University Press.

Countdown to a pensions scheme

1913 Federated Superannuation System for Universities set up following acquisition of universities.

1947 Douglas Logan, clerk to London University court.

1946 London introduces interim hardship scheme.

1946 University Grants Committee blocks cash for hardship schemes.

1948-75 Logan principal of London University.

1949 Academics' pay rise widens gulf between salaries and pensions.

1953 National hardship fund introduced.

1958 Hale committee established.

1960 Hale committee leaves choice of FSSU or terminal salary scheme to universities. Majority of universities prefer to keep FSSU.

1963 Maddex committee examines developments since Hale.

1968 Maddex provokes debate within universities about terminal salary scheme. Majority of universities agree to further exploration.

1969 Negotiations open between Association of University Teachers and Vice-Chancellors' committee.

1970 New pensions code sounds death knell for FSSU.

1972 First target date for USS.

1973 Second target date.

1974 USS Ltd incorporated after all universities eventually agree with Logan as chairman until 1977 (deputy chairman 1977/80).

1975 Incorporation of USS.

The Unesco guessing game



Mr Amadou-Mahtar M' Bow (left) and Mr Timothy Raison



Following the concessions made in Sofia, John O'Leary reports on Britain's latest stance

Britain's revised demands

1. Endorsement of board recommendations on priority gradings.
2. Further amendments to gradings, based on assessments of overall priorities, to intensify programme concentration.
3. Relegating studies not clearly relevant to the more action-orientated projects.
4. Approval for the board recommendation to adopt the second option for Major Programme 1.
5. Adjustments to programme proposals for 1986/87 to take full account of panel report on politically contentious work, particularly on disarmament and education for international understanding. Also to bring Major Programme III fully in line with previous consensus on evolutionary nature of the New World Information Order.
6. Continued moderation on Middle East issues.
7. Reduction in the number of general resolutions with a political slant at General Conference.

could take the steps necessary to keep Britain in. The common verdict was that it was the speech of a minister making his excuses for departure, rather than stating realistic terms for continued membership. The tabling of a lengthy resolution which demanded a revision of priorities beyond that agreed at meetings of the executive board, reinforced fears that Britain was asking for more than could be delivered.

The general conference is a large and unwieldy meeting of delegations, which generally have little room to manoeuvre within political positions settled in advance. The weeks of debate begin with interminable formal

presentations by individual nations and then plod on through an agenda too complex to bear reliable interpretation before the close of the conference. To expect genuine flexibility and a radical change of direction to emerge in the course of the meeting would be naive.

In any case, the British delegation considered 70 per cent of its demands to have been conceded at the executive board, subject to approval by the general conference. Spurred on by the threat of withdrawal by Britain and others, the board reached a consensus which represented a compromise going much of the way to meeting Western objections to the way Unesco

had been operating.

It had been enough for the ODA to express "guarded optimism" in a memorandum to the select committee. "Sensible decisions were taken on the 1985 cuts and on the report of the Temporary Committee concerning administrative reforms," the ODA declared. Mr Henry Arbutnot, the ODA under-secretary with responsibility for Unesco, explained to the MPs: "The atmosphere was better, because it seemed to us that more countries had realized the need for reform and were willing to cooperate with us in seeking it."

The committee, with its majority of Conservatives, was sufficiently im-

pressed to urge the Government not to carry out its threat to leave Unesco unless the general conference either overturned the executive board's recommendations or adopted new policy directives which would seriously challenge British interests and the new consensus. It was the last in a series of attempts by a variety of groups at home and abroad to persuade the Government to accept for now the reforms being proposed at Sofia.

Rather late in the day, Unesco's supporters in Britain began to apply pressure on ministers and to educate the public about the organization's role and achievements. A "Keep Britain in Unesco Committee" lobbied Mr Raison and at least two pamphlets have appeared, putting the debate in context and stressing Britain's leading role in both establishing and developing the agency.

International pressure had been more in evidence when the Government was preparing to give notice of withdrawal and can be expected to begin again if the indications are that the general conference reforms are not enough to satisfy ministers. The subject was raised at two Commonwealth conferences within the last month, for education ministers and heads of government, although neither made any mention in its communiqué.

For the moment, however, the centre of attention must be Sofia, where it seems that concessions are still being made in the hope of persuading Britain to rescind the notice of withdrawal before the December 31 deadline. Mr Raison's speech suggested that the Government had opted for a tough line to keep the pressure on the general conference after the conciliatory statements of the summer. But, like any good negotiator, he is giving away nothing on the level of reforms necessary to keep Britain in the organization.

He insisted in his Sofia speech that the Government's approach was not bound up with East-West power politics and that a sober assessment of progress would be made after the general conference. If that means insisting on acceptance of British demands as spelled out in the Sofia resolution, in addition to approval for the recommendations of the executive board, the result is very likely to be a parting of the ways. The pro-Unesco lobby must hope that the Government's real ambitions have been pitched at a more realistic level.

Philip Altbach looks at the issues which will ensure the success of scholarly publishing in south-east Asia

In search of foreign markets

Scholarly publishing is alive and well in south-east Asia. Its problems are those of growth and attempts to serve a region with a rapidly developing higher education enterprise and an expanding knowledge base. With a few exceptions, funding is not as serious a difficulty as access to appropriate markets, convincing able authors to write for local presses, and language and related issues. A conference on scholarly publishing in south-east Asia took place in September in Singapore and highlighted many of the key issues. Sponsored by the Festival of Books, Singapore, representatives from the six ASEAN nations (Singapore, Indonesia, Malaysia, Thailand, Philippines and Brunei) shared perspectives and discussed problems with a number of overseas participants. Everyone agreed that scholarly publishing is crucial for a developing region and that books from abroad will not adequately serve the knowledge needs of the region. Foreign publishers will not find manuscripts from a commercial standpoint, and more important, cannot reflect the concerns of local authors. Further, there is an immediate need not only for scholarly monographs to help improve the research base but also for university-level textbooks in the languages of the region to serve growing student populations.

Interesting example

The current base for scholarly publishing in the region differs from country to country. The extremes run from Brunei, with a population of under a half million but with tremendous oil revenues (it has the highest per capita income in the world at present) which is in the process of opening its first university, to Singapore, which has a fully developed publishing infrastructure in search of world markets.

One of the most interesting examples of indigenous scholarly publishing is Malaysia. Several of whose universities have established presses which issue both scholarly titles and textbooks. At the University of Malaya (Science University of Malaysia), an active university press provides handsome royalties to academic authors as an incentive to write textbooks for university-level use in Bahasa Malaysia, the national language. These books are

published quickly in photo-offset editions in order to get them into student hands and are later revised. The press also publishes traditional scholarly books in both English and Bahasa Malaysia. The university presses are heavily subsidized as part of a conscious effort to increase the flow of material on Malaysian topics. In addition to the university publishers, the Dewan Bahasa dan Pustaka (National Book Agency) has been actively publishing books in the national language for more than a decade. Most of the Dewan's publishing has been in the area of school books and books for general circulation. But a large number of scholarly books have been published as well.

Indonesia, the largest country in the region, has the weakest infrastructure for scholarly publishing. There are six university presses and several private sector publishers also issue research-based volumes. But the university presses account for only 2.5 per cent of the total output of titles. Distribution is a problem, as is keeping book prices so low that the fairly poor paid university lecturers can afford them. Curiously, there is virtually no cooperation between Malaysia and Indonesia in book production, promotion, distribution or translation despite the fact that both countries use the same language and both have made a strong commitment to indigenous language publishing. Until recently, the import of Malaysian books into Indonesia was quite difficult, but the conference on scholarly publishing was told that there is a new spirit of cooperation between the two countries.

Thailand publishes virtually all of its fairly significant number of scholarly books in Thai. Most of these books are issued by private sector publishers although there are two university presses. While there is a need for translations from English for use in university classrooms, Thai scholarship also produces a large number of publishable manuscripts as well. The Philip-University of Malaya, an active university press provides handsome royalties to academic authors as an incentive to write textbooks for university-level use in Bahasa Malaysia, the national language. These books are

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Publishing challenge

South-east Asia has been enjoying an impressive rate of economic growth for almost 20 years, although there are some storm clouds on the horizon at present. Its educational institutions have also expanded dramatically. Malaysia and Indonesia have moved to the use of the indigenous language for education at all levels, and this has created challenges for publishers as well as for the academic community. Markets for scholarly books remain bifurcated within the region and publishers have found access to the major foreign markets in North America, Australia and Britain very difficult to penetrate.

Indeed, the conference devoted considerable attention to access of south-east Asian books (mainly in English) to the international market. There are both economic and intellectual/political reasons for this concern. Given the limited markets in the region, success for many scholarly titles depends on international sales. This is a common problem for scholarly publishing in much of the third world. In addition, publishers and scholars are concerned about access to knowledge about their

region from outside and they wish to ensure that local interpretations have international exposure instead of the traditional pattern, where the region is viewed through the eyes of Western scholars.

South-east Asian academics are tired of being viewed as a periphery in terms of a market for books as well as in the creation and dissemination of ideas and research. It is argued that, to a considerable degree, academic institutions have come of age and that local scholars produce world-class research, particularly on topics relating directly to south-east Asia but are denied access to world markets. Scholars point to the grave imbalance of book sales in the region with a large number of Western books - both university texts and scholarly books - being imported but with few scholarly titles reaching a foreign export market.

An interesting sidelight on this situation is the role of Oxford University Press. OUP has been active in indigenous publishing for a long period, and many of the personnel working for the university presses are graduates of OUP. In Malaysia, Oxford has been active in publishing texts in Bahasa Malaysia. Heinemann has had an active local programme, but has cut it back severely as a result of its shake-up in England. The other multinational firms have not been active in local publishing and have preferred to make money on exporting their books to south-east Asia.

South-east Asian scholarly publishing has "taken off". It faces problems of language, regional cooperation, access to international markets, convincing local scholars to publish locally instead of with the multinationals and small internal markets. But virtually all of the countries of the region are actively engaged in scholarly publishing and in most there is the financial backing to make this basically unprofitable publishing possible. And as this conference proved, there is a commitment to working cooperatively to solve problems and ensure the success of the important enterprise of scholarly publishing based on the dissemination of research by south-east Asian scholars and on the region.

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Risk, someone once said, is the sugar and salt of life. Risk exists in all we do, and in recent times the full impact of risk has been brought to our attention in a most graphic way as we watched television reports of major industrial incidents such as the events at Flixborough, Seveso, Three Mile Island and Bhopal.

During recent months it seems that we have had more than our share of these major incidents with the Air India crash, the Japan Airways disaster, the Italian dam burst, Portuguese rail crash, the tragedy at Manchester Airport and of course the terrible devastation caused by the Mexican earthquake. These events certainly underline the risks of modern living but always, in a sense, seem remote from us as individuals. They capture the headlines and cause us to stop momentarily as we contemplate the large number of people involved, but they always happen to someone else.

In the midst of the reporting of these major incidents it is easy to both overestimate the likelihood of such events occurring and to overlook the steady less dramatic incidence of risk. Since the recent spate of airline crashes it is interesting to speculate on how many people have changed travel plans and used some other form of transport where possible. These risks which command the headlines can easily be overestimated. This has been shown a number of times in experimental work but is equally evident for us all to see.

Take the example of Northern Ireland and the activities of terrorist organizations with the consequent risk of death or injury. A person going to Northern Ireland is much more likely to be concerned about death as a result of the civil disturbance than he is about being killed in a road accident. The latest figures (1983), show that while 77 people died as a result of the civil disturbance, 175 died in road accidents. In fact the rate of death from civil disturbance in Northern Ireland per 100,000 people was 4.89 compared to a figure of 5.96 for those having a fatal fall in a private house in Scotland, England and Wales.

The reporting of risk certainly plays a large part in conditioning the perception of people. It also underlines our awareness and respect for the less dramatic but much more constant risks; the £553.6 million cost of fire damage in Great Britain during 1984, over £1.5 million every single day; the 324,314 people killed or injured in road accidents during 1984; the 432,039 burglaries in private houses; the 749,937 thefts of or from vehicles or the £211.4 million paid by insurers in respect of employers' liability claims.

The cost of risk, whether large and dramatic or small and insidious, is enormous and a drain on national resources. The management of risk, therefore, assumes an importance quite distinct from the particular detail of individual events. This concept of total risk management especially in the corporate environment is one which developed rapidly over the past few decades and is now beginning to attract the attention of those involved in education.

The concept of risk itself has been the subject of inquiry by academics for centuries but in the industrial and commercial context risk can be divided into two forms. There are speculative risks to which any entrepreneurial activity is exposed, risks which are voluntarily assumed in the course of business. Will the product sell? Is it the right colour? Is the price correct? The result of running these risks can be of course be a substantial profit or if things do not work out as expected, an equally substantial loss.

The second form of risk is the pure risk which differs from the speculative variety in as much as no profit or gain can result. The risk of finished goods being destroyed by fire before they can be sold is a pure risk. A pure risk can only result in a loss or at best the status quo whereas the speculative risk can result in profit, loss or status quo.

The effect of these pure and speculative risks can be equally dramatic. A major explosion at a factory can be as damaging as an incorrect marketing strategy but the value of classifying risks is not solely academic. The speculative risk, while always present, is rarely provided for specifically by the entrepreneur. It is a risk he accepts as a result of engaging in the particular business activity. Pure risk however, has normally been the subject of specific provision. The traditional response has been to insure. A person starting up a new factory would invariably consider the risk of fire and effect

G. C. A. Dickson looks at the importance of educating for uncertainty



The explosion at Flixborough, 1974: "a classic example of the absence of this broad approach".

Risky businesses

a fire insurance policy. The speculative risk of whether his produce will sell or not is one which he carries himself.

It is this traditional response of insuring pure risk which has gradually given way to the concept of risk management. There is no one authoritative definition of risk management but one definition which appears regularly is the "identification, analysis and economic control of those risks which threaten the assets and earning capacity of an enterprise". This definition is wider than simply insurance management and imagines a total approach to the problems posed by risk.

The idea of risk identification goes well beyond the traditional approach of "spotting" insurable risks. The risk comes first and whether it is insurable or not is a decision which can only be taken once the risk has been identified. Limiting one's thinking or remit only to those risks which the insurance market will handle places unrealistic constraints on the role of risk identification.

The comprehensive identification of risk can best be illustrated by considering a fictitious open-roofed factory with the risk manager walking on a gantry. He is able to see all the departments which make up the factory, the interrelationships among departments and he does it all unblinkingly by departmental loyalties.

The explosion at Flixborough is a classic example of the absence of this broad approach to risk problems. One chemical reactor was removed for repair and the two adjoining reactors and links maintained production. The temporary bypass proved inadequate and the explosion resulted. The chairman of the subsequent board of inquiry said: "The key post of works engineer was vacant and none of the senior personnel who were chemical engineers were capable of recognizing the existence of what in essence was a simple engineering problem".

Everyone was doing their job but it was no one's specific job to identify the risks arising out of what they were all doing. Effective identification of risk is the essential first step in the management of risk. Fortunately a range of identification methods exist to assist the risk manager. Fault trees, flow charts, check lists, physical inspection, organization charts, hazard and operability studies are all available for the systematic identification of potential loss producing events.

The identified risk must be measured both in terms of the frequency with which it will occur and the severity should it in fact occur. Calculations of this kind give some indication of the impact a risk is likely to have and hence provide some guidance as to the most appropriate method of control. At the

end of the day a firm does not want to pay more than the expected cost of the risk itself.

The emphasis must be on economic control and the control can be either physical or financial. Physical steps can be taken to reduce the risk either preloss, the design or construction of a building for example, or post loss as in the case of automatic sprinkler systems or burglar alarms. When the risk has been reduced as far as economically possible then the risk manager must decide whether to retain it or transfer it.

This is where the financial aspects of control come in. The company has a choice, either it keeps the risk or gives it away. Risks can be retained for a number of reasons. It may simply be too expensive to do anything other than retain the risk. The cost of insurance, for example, may be higher than the expected cost of the risk and so retention may be the only sensible policy. Retention may also be advisable where the risk is predictable.

Buying insurance is fine where there is uncertainty about the frequency and severity of incidents. However, in circumstances where there is a large measure of predictability there is no value to be gained in swapping pounds with an insurer. If there is a steady stream of losses and this has been the pattern for some time the insurance company will calculate a premium so as to provide enough money to cover the losses, their expenses and profit. The manufacturer may just as well retain the risk and pay losses as they arise.

A major drawback on the retention of risk is that there is little tax incentive to create the funds out of which the retained losses are met. In addition the company has lost the protection it may need against the catastrophic event. For these and other reasons, most firms prefer to transfer the risk to someone else and insurance remains the principal method of risk transfer. A company is prepared to purchase peace of mind by exchanging a future uncertain loss for a certain immediate loss, the insurance premium.

This brief outline hardly does justice to a growing area of concern. Risk management as a distinct management discipline is still in its infancy and the majority of those occupying risk management positions have found their way there from an insurance background. As the complexities of risk grow and the methodologies of identification and analysis increase there will be a need for the provision of a sound educational base.

Four main issues have to be faced as the development of risk education continues. The first refers back, in part, to the problems already mentioned of perception. Normally when a student starts a post-school course of study, that course is seen as building upon what has been taught at school.

Courses in mathematics, science, English, French, history, geography and even accountancy and medicine can be recognized by most students as having some foundation in school work. How many people, however, can recall any school study of risk and uncertainty? Most of us go through our schooling being encouraged to think in terms of certainty, even when that certainty is completely unwarranted.

Much of our current schooling perpetuates these feelings of unwarranted certainty and hence students have no foundation upon which higher education can be built. Those who are involved in risk education see it as advisable to introduce some form of risk education at primary and secondary school level. This is not in an attempt to produce either neurotic or paranoid youngsters but simply an attempt to change unwarranted certainty into warranted uncertainty.

The second factor we can identify when we look at the whole area of risk education relates to the nature of risk itself. Risk is not a single discipline in the same way as French, English, mathematics or history. Risk is interdisciplinary. It introduces a range of other disciplines and must do if it is to form a neat educational disciplinary boundary. The sources of risk can be scientific, legal, financial, social, technological, political or any combination of two or more of these areas.

Any large manufacturing plant, for example, can have all these potential sources of risk present; the chemicals used in a particular process may involve a fire, explosion, corrosive or disease risk; the product which is manufactured and eventually sold may injure the buyer or damage property and so give rise to the legal risk of product liability; changing rates of exchange for foreign currency may be a financial risk for the company; a sense of moral liability or social responsibility may produce a social risk where for example some payment may be made to owners of damaged property adjoining the factory even where there is some doubt as to whether or not the company vehicles entering and leaving the plant were responsible; faulty production processes may be the cause of a number of industrial injuries or damage work in progress; finally a political risk can emerge where foreign governments, for example, confiscate goods or impose serious import or export controls.

More often the risk involves one area. Take for example the chemicals used in a process. They may well cause some industrial injury which will in the end involve the legal employer's liability risk. This in turn will involve insurers and possibly reinsurers. The event may, however, taken place in a foreign operating subsidiary with the

consequent foreign exchange risk; it may spark off a hostile reaction towards the company by local residents and other employees.

Risk is interdisciplinary and therefore any education for risk must also be interdisciplinary. There is a nuclear management but in the main it is largely a matter of applying other disciplines and combining them in different ways. We must take individual discrete disciplines and combine them in such a way as to produce something new, something which is more than simply the sum of the parts. Any education in risk must be interdisciplinary and not simply multidisciplinary.

The third factor which it is essential to remember when thinking of risk education is the need to include both the pure and social sciences. Risk does not recognize boundaries between pure science and social science or between physical and financial risk. It is necessary to blend together the scientific, technological aspects of risk with the financial managerial aspects. In this way we stand a chance of ensuring that in the future people with blue collars will be able to communicate with those wearing the white collars. There is a long way to go to achieve this. In a European study carried out by the Geneva Association for the study of Insurance Economics in 1981, they identified 228 courses which involved some teaching on risk or insurance. Of these total number only 7 per cent involved any form of engineering, almost 60 per cent were economic courses, heavily biased towards insurance, and of 210 staff, less than 20 had a science background.

The fourth and final issue which faces and will face those engaged in developing risk education is the problem of recognition. Essentially this will mean recognition first by the authority where the course is to be offered and second by the eventual employer of the student. Often there is a feeling of opposition to education, some feel that it is too vocational and hence not "academically" justified while others believe that we all know enough about risk in the first place. This is the normal stance of those who, for example, denigrate the need for banking studies on the basis that most folk have a bank account and therefore know what is to be known.

The more serious recognition problem comes with those who want to assist but believe that their particular discipline is being "watered down" to satisfy some overall criterion. We have said already that risk and hence risk management education, must be interdisciplinary and it is genuinely difficult for many people to recognize the part their discipline has to play.

Take, for example, the biologist. One severe risk in industry is the risk of the "abnormal and surplus" ways of playing in making students of risk part of the source of these biological risks, their effect on human and physiological risk for students to understand. A normal response, and one which is quite understandable, is for the biologist to say that in order to achieve these aims he requires a number of foundation courses covering several terms.

It is possible to work at these problems and to begin to overcome them. The experience in Glasgow where one third of the entire course in risk management is taught by scientists, has been that once converted to the idea that part of their discipline have a very important role to play in risk management, people do become enthusiastic.

Bearing all these factors in mind, what does the future hold for risk management education? There is the full time degree course at Glasgow College of Technology, the risk management option in the Fellowship of the Chartered Insurance Institute and options in several courses at universities and colleges throughout the country. These are all important roles to play in risk management, the person already in employment is not, at the moment, catered for.

The future is bright and needs to be. Risk in all its forms causes substantial waste to the country. In direct financial terms and in days lost to industry, it takes its toll relentlessly. Behind all the figures also lies the human suffering and tragedy which follows major risks. It is essential that risk management continues to develop and along with it, education in risk.

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A planetary perspective

H. G. Wells's futuristic visions inspired not only his science fiction, but also his political writings. Maurice Cowling analyses the development of his beliefs



H. G. Wells: his socialism was connected with national efficiency and common sense.

ministrators, public officials and voters. In justifying his politics, Wells claimed that mankind had "struck... its... camp" and was "out upon the roads" and that existing society had to be replaced by something better. The future was of fundamental significance, the difference between legal or submissive and legislative or creative minds being the difference between retrospective thought which deduced rules of conduct dogmatically from the past and thought which treated morality as something to be "designed, foreseen and... attained in the future". The future, indeed, was said to be fixed and determined and a possible object of knowledge and the laws of social and political development were to be as capable as the laws of chemical combination of ensuring that "chance impulse and individual will and happening" would be eliminated.

The emphasis on prophecy and prediction was connected with a view of great men as "symbols and instruments" of the forces that lay behind them, and of socialism as having the

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of consonance with the forces of the future that great men had had with the forces of the past.

In relating socialism to fundamental forces, Wells dismissed trades unions as arresting and delaying organizations which the wider movement of modern civilization was against. He assumed that working class and lower middle class interests coincided, and that the lower middle classes had no interests in common with the plutocracy or government.

Wells's politics were a response to the realization that the level of ability in government was "a scandal", that industry needed to be reorganized and that revolution would put an end to the "slack, extravagant life... of the last three or four decades" unless socialism did so first.

The *New Machiavelli* was an argument in favour of divorce, a commission against sexual conservatism, and an anti-liberal tract. Its chief target was the Liberal Party and its chief argument was that the Liberal Party was either effete or absurd, or the instrument of mindless manufacturers. It bristled with doctrine, but its sneers at the Webbs and Keir Hardie, its praise of Balfour (ie Evesham) and its hero's conversion to Conservatism did not mean that Wells had become a Conservative. What Wells wished to suggest was that, since Liberalism was a "dead dog", it should be replaced by the "new morality" which he described in the chapter entitled "The Samurai" in *A Modern Utopia*.

The Samurai were to be men of imagination and Comtean spirituality, for whom literature would do what the Bible had done for the Jews and whose political function would be to play a campaigning role against distinctions of class, race, nation and colour. At the same time Wells's conception was physical, including women as well as men, requiring careful planning of health, dress and procreation, and assuming that the Samurai, being chaste rather than celibate, would avoid the distrust of the physical and emotional instincts for which monasticism had been responsible in the past.

Wells shared the radical determination to destroy the power of the hereditary aristocracy. But he dodged the practical question, implying that the Samurai would bring "constructive brotherhood" to anyone who might wish it while making it obvious that the order was not only to be self-selecting but would also supply the only admini-

strators, public officials and voters. In justifying his politics, Wells claimed that mankind had "struck... its... camp" and was "out upon the roads" and that existing society had to be replaced by something better. The future was of fundamental significance, the difference between legal or submissive and legislative or creative minds being the difference between retrospective thought which deduced rules of conduct dogmatically from the past and thought which treated morality as something to be "designed, foreseen and... attained in the future". The future, indeed, was said to be fixed and determined and a possible object of knowledge and the laws of social and political development were to be as capable as the laws of chemical combination of ensuring that "chance impulse and individual will and happening" would be eliminated.

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left the impression of recoiling from dismissiveness and of wishing to extract as much as a humanistic religion could extract safely. What he claimed to want was relief from logic and classification and provision of an area of activity in which men could operate freely and responsibly, uninhibited by the utilitarian and material or the "socratic... exactitude" of Comte and Spencer. His slogan was that the "direction of conduct followed... from belief" and that beliefs, so far from being "proven facts", were forms of artistic expression involving arbitrary assumptions which men imposed upon the universe pragmatically and experimentally in the hope that they would correspond with something real.

Wells's conception of God was expressed most clearly in *God the Invisible King*. There he affirmed that there was a living God quite different from the trinitarian God of the Nicene Creed. This was the "God of the Heart" who was not separated from men by reverence or omnipotence and would not be obscured by dogma. It was a God, moreover, who was neither magical

There was a living God quite different from the trinitarian God

and providential nor the "bickering monopolist" whom Colenso had attacked. The "God of the Future" on the contrary was a "finite... spirit" which "existed or strove to exist in every human soul", working in and through men and giving them courage, generosity, thought and will.

Wells aimed to transcend the "hunting for a cosmic mortgage" that he associated with Nationalism and Utilitarianism. He rejected personal immortality by reason of its "egoistical encumbrances" while absorbing the individual personality into the "Being of the Species" and the "Eternal... Being of all things". In explaining in what sense he held all religions to be in measure true, he praised Mohammedanism, dismissed Hinduism and the transmigration of souls and explained that, though any religion could be said to be true which worked for those who lived by it, no existing religion worked for him.

Wells wrote approvingly of the idea of a religious system as "many faced and enduring" as Christianity must have been saturated with truth. But he found Christian theology "over-devised and excessively paraphrased" and Christ's "incomprehensible silliness".

ness" an image of virtue so terrible as to have made fellowship with men impossible.

In explaining his religion, Wells claimed to be not only vague and mystical but also mystical and arbitrary. That "things moved to Power and Beauty" he rightly described as rhapsodical and incomprehensible while the idea of the "whole living creation walking in the sleep of instinct and individualized illusion" was not much improved when man rose out of it and "began to perceive his larger soul... and collective, synthetic purpose". Indeed, if this meant anything at all, it meant that religion issued, as Wells explained it, not in churches or religious institutions but in socialization of existing state organizations and the creation of a world state.

In the second edition of *First and Last Things*, Wells quoted Creighton's dictum that the church was "mankind knowing and fulfilling its destiny" and attached to it the rider that "the church so explained" was coterminous with human thought. It was the whole body of human thought of which Wells was thinking when he argued that "we moderns... are children of the Catholic Church" and that that Church could become "something greater than Christianity" if it would accept the authority of "morally-impressioned... writers and speakers" for whom reformation and reconstruction would be the task of the future.

This was said to be a task for men of goodwill. It was said to be especially the task of socialists who wanted a Church through which they could think and feel collectively, "serving God's kingdom on earth." Modern religion is a process of truth, guided by the divinity in men. It needs no other guidance and no protection.

This was Wells's religion in 1917; it did not change much subsequently. *The Salvaging of Civilization* in 1921 laid out the need for a new Bible or "Bible of Civilization" as Comenius had conceived it. *The Open Conspiracy* saw in a new religion and a new kind of psychology the chance to "subordinate self" and assimilate whatever was digestible in traditional socialism. In *A Short History of the World, The Work, Wealth and Happiness of Mankind* and *Innumerable other works of social prophecy* that Wells published in the 1920s, 1930s and 1940s, religion's role was described encyclopaedically and with provision for an educational discipline, the main aim of which was to transform the world on this side of the grave.

The author is a fellow of Peterhouse, Cambridge. This article is an edited version of the second volume of his *Religion and Public Doctrine in England, published last month by Cambridge University Press.*

Richard Cobb



Darkest secrets of the Direct Method in war-hit Blackpool

The day after I got to Blackpool towards the end of 1940, I went round to the rather nondescript office block - a three-storey affair in cement, with patches of damp, dating from the mid-1920s - that housed the language school. It was halfway up an equally nondescript, long straight road that ended up at Squires' Gate RAF Station.

The location at least seemed symbolically appropriate, for Squires' Gate would be likely to be the first stopping-off place for those of our pupils who had managed to make the course.

Inside, there were the usual WD folding chairs and a trestle table behind which was seated a burly-looking LAC, deep in *Revue*. He looked at me crossly, commenting that no-one was the latest of the Fancy Boys, and telling me to go upstairs, first door on the left, and report to the Squadron-Leader.

When I knocked on the door to the left, a very faint voice said "Come in." The Squadron-Leader was sitting at his desk, which was bare of any paper; there was an empty wire in-tray and a lot of ash from an old, well-chewed pipe. He looked the picture of weary dejection, raising his head slowly to display the face of a sad spaniel.

His watery blue eyes took me in reluctantly and with every appearance of distaste, while he tugged at the tobacco-stained tips of his straggling white moustache. "I don't know why he dug me out to do this bloody job," he opened, not very encouragingly; he seemed, not very encouragingly, indeed, in his exampled blue-grey uniform and with his white eyebrows apparently covered in pale dust, he did look as if he had recently been dug out of somewhere.

His remark was clearly not meant as a conversational ploy requiring some rejoinder from myself.

"He went on: 'So you are the latest of the black hat brigade. Cobb, isn't it?' Of course I had been a mistake coming with my French black hat. Its presence seemed to confirm the dusty Squadron-Leader in whatever unfavourable opinion he had already formed of my colleagues.

He added he was only my military superior, he had to see that we were properly housed and drew our pay and

Barker's only subject of conversation was Czech girls

that sort of thing, commenting, unkindly, that he had not put on a uniform after all those years to look after the likes of us.

Well, there was a mite of consolation in that plural. It did not look as if he thought any worse of me than of my as yet unknown colleagues. "Come to see me if you have any problems about billets, rations and that sort of thing; and, if I may give you a word of advice, remember that the Poles are very touchy about rank. Can't blame them, the poor buggers have got it's days. Three did have black hats, but the fourth went bareheaded till, all at once, and much to our surprise, he abandoned our common civilian status and more than civilian appearance, to re-emerge, without any transition, in a

very smart flight-lieutenant's uniform. The owner of a Leon Blum, Latin quarter hat was a young blond giant with China blue eyes, called Barker, about 25 or 26, who wore a long black leather overcoat he had acquired in Prague. He had spent three or four years teaching English there, an exercise, he hastened to tell me at our first meeting over a pint, that had often involved the active participation of eager Czech girls making short work of his fly-buttons. Could this be the Direct Method? Barker was always on about Czech girls, his only subject of conversation.

I soon discovered that the Poles, as if in response to some hidden signal, had at once very much taken against him. One, a colonel, had told the Squadron-Leader they no longer wished to be taught by him. Barker did not stay long in Blackpool. Soon posted, we were told, to teach *male* Czechs at Wilmslow.

Barker was rather improbable in Blackpool. But another colleague looked even more improbable as he seemed to glide silently through the garish scenery, as if floating a few inches from the ground. He had the appearance, urbanity, and exquisite politeness of an elderly Chinese man-

He suggested that perhaps we should 'imbibe' together

darin - I was only 23 at the time. He seemed both ageless and venerable, though he was probably only in his late 30s.

He had at once established a peculiar hold over the Poles, almost as if he had been a priest or a Jesuit father. He introduced himself to me with affable ceremonial, suggesting that perhaps we should "imbibe together" at the first suitable opportunity, adding that his name was Harold Acton. I could call him Harold, he would call me Richard. We did have a Grand Marnier together in a quiet four-star hotel in Lytham-St-Annes, "a better class of place", Harold explained.

The Homberg had with the stiff upturned brim belonged to a tiny, garrulous man with a speckle beard called Professor O'Grady. All three names seemed highly improbable. I still think they must all have been assumed. He seemed too much like something out of André Maurois, though the beard looked genuine.

If he had not had such a comical appearance, one might have suspected that he had worked with the Secret Service. His conversation, always over whisky, was full of hints and nudges, sudden reticences, winks and name-dropping. There were several versions of his curriculum vitae up to 1940; often, they would be handed out, without any attempt at consistency, in the course of a single evening.

He certainly knew a lot about teaching English to foreigners, referring learnedly to someone called Jespersen. On the eve of the war, he had been living in Antwerp - presumably the site of his chair - which he had left, or so he claimed, late in May 1940 on an English destroyer.

Certainly, my three colleagues all had some experience of teaching English to foreigners, though none, much to my relief, had ever heard of the Direct Method.

When I approached the fourth man on the same subject, he said with withering contempt: "Do you mean to say you do not know what the Direct Method is?" Well, he was in a minority anyway. Luckily, he did not stay long with us in Blackpool and took his seat in the RAF.

Asking poets to record their verses especially for a historical archive has not been a widespread practice in universities, but neither is it new. Harvard, for instance, began recording as far back as 1926, and has built up a major collection that includes readings by Pound, Eliot, William Carlos Williams and Marianne Moore.

Keele, by contrast, is a latecomer. It was only a few months ago that we asked Charles Tomlinson to record all his verse. And it was as recently as this September, at the Clock House Studios in Keele's music department, that he began to put on tape some of the 500 poems he has published. His early collection, *The Necklace* (1955), is now in the archive, as well as two series of readings, drawn generally from the poetry, that the university is now making available to the public in cassette form.

Many recording sessions lie ahead, but already it is clear that Keele's new archive will differ in scale from those in other British universities. Its completeness (or as complete as it is possible to be when the author threatens to outstrip the recording schedule by writing new poems) is also a factor which makes one more seriously consider the place of such evidence among the usual materials of literary research: manuscripts and printed editions.

For Tomlinson's recordings, though offering the same fascination as the study of draft versions (like those examples in the current Tomlinson exhibition at Keele library) reveal much more in terms of quantity than the most interesting manuscripts. We are dealing not with the evolution of individual works, but - as the poet records the verse chronologically - with the evolution of a whole poetry across 30 years.

The quality of Tomlinson's readings so far makes me feel that the eventual whole will be an "edition" on its own: not an oddity we consult as a mere extra to our visual reading, but an indispensable complement to it. And hearing Tomlinson on record more through the time-span of a poem, in the discipline of pace, and with his special cadence, makes this more than an aesthetic consideration.

The recordings, by their very nature, bear out Tomlinson's ethic of relation and community: that we exist together in a world of time, space and wondrous "otherness", which is not to be imposed upon or impatiently speeded up by our egos. Indeed, if one's mind and eye, in their silent reading of a Tomlinson poem, have mentally overflowed it - never walked its terrain, so to speak - then these recordings have the effect of bringing one to ground, with the physicality of a voice in its tempo and accent.

For though Tomlinson has travelled widely and written about Mexico, America, Italy and Gloucestershire where he now lives, he is also a native of Stoke-on-Trent - as can be heard when he reads one of his funniest poems, "Class". "Those Midlands", he says, "once cost him his job when he was accused of Percy Lubbock, author of *The Craft of Fiction*". "That title was full of class. You had only to open your mouth on it to show where you were born or where you belonged."

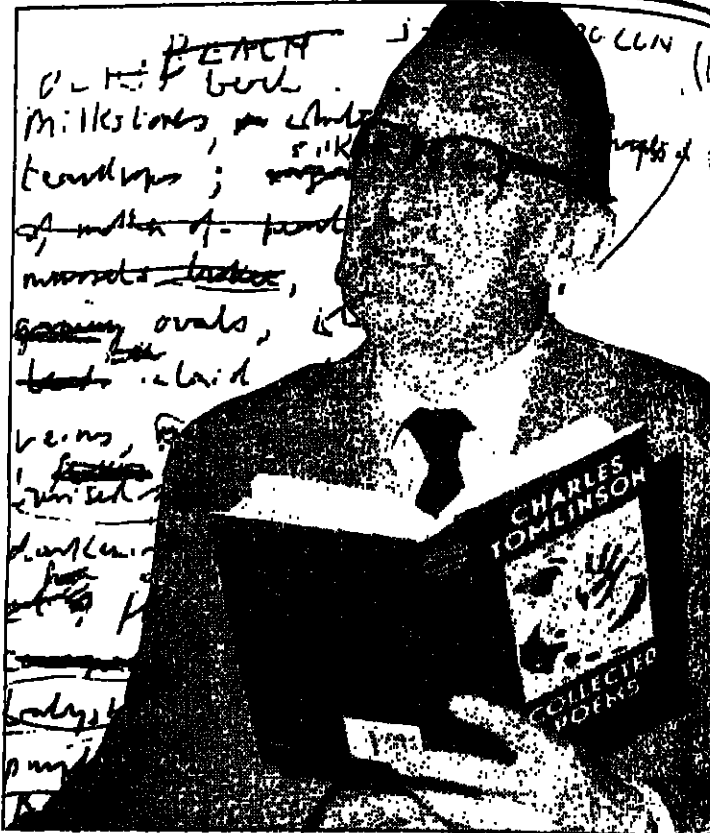
Those Midlands' as, together with Tomlinson's way of distributing stress in the verse-line, make up the authority of his reading in another poem, "At Stoke".

I have lived in a single landscape. Every tone And turn have had for their ground These beginnings in grey-black: a land Too huddled to be primary - all the same The first in feeling.

The value of being a listener is that one can actually hear the deliberate flatness of short as in "land / Too huddled", the turn and lift of voice in "all the same". The stress on the long *a*, strangely enough, points one to what is not the same, and what is freshly primary yet, about his feeling for this place.

There is also a vocal gift for carrying the listener forward, as if rising high above the Stoke valley. The hills: *Swell up and free of it to where, The whole vapoury, stretched The cows stand steaming in an acid wind.*

This place, the first to seize on my heart and eye, Has been their hornbook and their history.

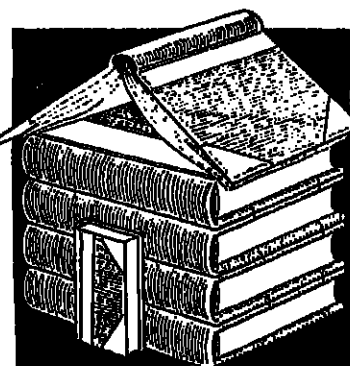


Charles Tomlinson... from manuscript to studio

The poet finds his reel voice

The poet and artist Charles Tomlinson was born in Stoke-on-Trent in 1921. After Queens' College, Cambridge, he worked for a time in Italy, before returning to teach at the University of Bristol. He has been professor of English literature there since 1982.

Much of Tomlinson's early recognition came from the United States, where he has been a frequent visitor. His work exhibits above all a great sense of place, both of itself (he is profoundly conscious of the threat to the natural world by technology and industry), as the setting of universal truths, and as the locus of historical events (significantly, two of his "public" poems deal with political figures - Lenin and Trotsky - forced into exile). Tomlinson's material is a rigorously and ironically modern one.



Tomlinson halts after "acid wind" before the final couplet, with the effect that the vantage-point of contemplation seems all the more naturally arrived at - and then proceeded from in our thoughts.

The unstained quality will, I think, be a major lesson of the recordings, not just for Tomlinson researchers but for other poets. Poetry, in his sense of it, is a vindication of shared language, so that though the words may be energized and made more clearly precise, they must not seem the over-worked victims of the rap artist.

The visionary realization that one hears at the end of Tomlinson's "A Sense of Distance" could have a bardic theatricality, except that Tomlinson is too finely skilled, in clarity of word and dramatic timing, to fall into such danger. He knows the exact moment at which to unfold revelation without any portentousness.

And it seems as if a wind had hung wide a door above an abyss, where all the kingdoms of possibilities shone like sandgrains in the mind's own sun.

Significantly, Tomlinson lengthens the vowel of "door" and powerfully stresses "abyss", a vocal opening-up of space that one can also hear when he puts a pause between each word of "mind's own sun". Distances really do seem to lead away. But in printing syllables apart, and discovering their singularity, Tomlinson has found the vocal equivalent of his lighting up the word "sandgrain" variety.

His "Stone Speech", for example, delights in the heterogeneous. On a map, recognition, meets, non-human

plenitude in a kind of kinship: "chick-swaddled babyshapes, / tiny fists, / insectones / and / facestone's brother / skullstone." But one needs to hear Tomlinson read this poem to catch the sense of spontaneously winning back relations between self and world which goes right through his poetry.

As he says in "The Changes of Rhyne": "In the finding fortuitous, but once found, binding."

The fortuitous is a thing of risk, and seems all the more so in Tomlinson's recording of the poem, when, in an extraordinary performance, he elicits one after the other, a series of rhymes that suggest the varied ways we can discover active relation with existence. The self-destructive, he says, is one of this. They rush between extremes. But between:

Rest-in-peace and precipice, come in Increase, lease, re-lease (in both Senses); and immersion, convolution of Mass, that is, into energies to combat confusion.

Let rhyme be my conclusion.

This is the voice of moderation, but if, say, one called on an even-tempered comparison, like Alec Guinness's recording of *Four Quartets*, the difference would be immediately striking. Tomlinson's calm has eagerness, agility, and the power to excite the listener to freshness of perception. This is why one need not fear that Tomlinson archive, when now advanced, will pretend to a finality of interpretation that later generations can put aside (in the way that one puts aside the would-be definitive readings of early work by the older author).

There is a partnership with the reader, but also a partnership with the reader: a way that we might continue the vocal or visual reading of the poems on our own behalf. Even if this is so, one cannot plead that more universities should necessarily record more poets. It depends on quality of achievement, and to a great degree, as Charles Tomlinson has shown, on the skill of the reader. I am sure, however, that he has already set a standard by which this genre will eventually be judged.

Richard Suggs

The author is senior lecturer in English at the University of Keele.



Events

Concerts:
Tonight, Great Hall, University of Essex, George Malcolm (harpsichord): Bach, Handel and Scarlatti tercentenary concert.

November 6, Royal Academy of Music, London: Choir, Ravel, Haydn, Brahms, Vaughan Williams.

November 7, 1.10pm, King's Hall, University of Newcastle: Susan Sheppard (baroque cello), Jane Coe (baroque cello) and Lucy Carolan (harpsichord): Vivaldi, Gabrieli and Scarlatti.

November 7, University of Aberdeen: Music and Revolution: music from the Soviet Union 1967-85.

November 7, University of Lancaster: Peter Donohoe (piano): Bach, Tippett, Copland.

November 12, University of Essex: Gabriel String Quartet: programme includes Schubert's "Death and the Maiden".

November 12, Turner Sims Concert Hall, University of Southampton, Allegri Quartet: Haydn, Beethoven, Tippett. Piano recital by John Irving.

November 13, Royal Northern College of Music: Nonach Consort of Voices: Best Songs of Protest, Piety and Prayer.

November 13, Bloomsbury Theatre, University College London: Anthony Bottom: jazz quartet.

November 14, Royal College of Music: RCM String Ensemble: Elgar, Bloch, Gage.

November 14, Assembly Hall, University of Strathclyde: University chamber choir: Rossini's *Pelle e Mezza* Sinfonia.

November 15, Faculty of Music, University of Manchester: Lindsay String Quartet: Haydn, Shostakovich, Mozart, Beethoven, Great Hall, Goldsmiths College London: Maw, Muldowney and D. Matthews.

November 21, University of Reading: University chamber orchestra: Stravinsky, Mendelssohn, Beethoven.

November 22, Great Hall, University of Nottingham: Tape Music: electronic and computer music from Douglas Roberts.

November 24, Guildhall School of Music and Drama, London EC2: Sultan Khan (sitar) with Zakir Hussain (tabla) and classical Indian music.

November 27, University of East Anglia: University choir with Jonathan Stokes (trumpet): programme includes Haydn's *Trumpet Concerto*.

Other events:

November 4 and 5, Trent Polytechnic, Pulton presents Greek by Steven Berkoff.

November 6 to 9, Gulbenkian Theatre, University of Kent, Canterbury Dramatic Society: *The Noble Spaniard* by Somerset Maugham.

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November 7, 12.30pm, School of Architecture, Plymouth Polytechnic: Architect Gordon Benson talks about his work.

November 7, Royal Academy of Arts, London: John Willard gives a talk "From Stage Picture to Stage Monologue: German theatre and the visual arts 1900-1933".

November 7 and 8, Creative Arts Studio, Leeds Polytechnic: Appeal Production *Two Way Mirror*, based on the Protona Affair.

November 7 to 9, Arts Centre, Aberystwyth, Channel Theatre Company in Joe Orton's *Loor*.

November 11, University of Surrey: Cend Rumens reads her poetry.

November 11 to 18, Riverside Theatre, University of Ulster, Abbey Theatre Company presents Frank McGuinness's play *Observe the Sons of Ulster Marching to the Somme*.

November 12, Theatre in the Mill, University of Bradford, Commedia: music and dance directed by Michael Parkin.

November 12, School of English and American Studies, University of East Anglia, Tom Macfarlane of Jonathan Cape talks to John Fowles.

November 12 and 13, Nuffield Theatre, University of Lancaster, Monodrama: *Observe the Sons of Ulster Marching to the Somme*.

November 13 to 16, Theatre, University of Essex, Woody Allen's *Death and*

Shakespeare for our times: Adrian Kiernander in Paris

Confronting history



Who, smiling, rides across the poor, haggard people. Is Leng Sary, filled with hate. Sitting behind him, Pol Pot remains unimaginable. The two old women have seen the new tyrants of Cambodia pass by. How can it be that they're so fat? they wonder.

On Highway No 6 Phnom Penh was its source. The slow, blind stream, the human stream.

Where will it flow out? One of the most obvious debts to the Shakespearean history plays is the characterization. There are no absolute villains in *Sihanouk*, just very strong personalities, and the events are usually motivated not by *realpolitik* but by personal vanities, appetites, obsessions or ambitions. The fall of Phnom Penh is shown as a result more of Lon Nol's superstitious indecision than of historical inevitability. What is important above all is to make the characters live on stage.

The fact of treating contemporary history is important in two distinct ways. Most obviously the play gives the audience deeper knowledge and understanding of our own world. Henry Kissinger's concealment of the bombing of Cambodia is a fascinating study of the way power operates in our system. By contrast, the utopian vision of the Khmer Rouge leader Kieu Samphan sounds familiar and perhaps on the surface even attractive. "I dream of a perfect society. Wipe away everything. Empty the towns. Begin the world anew. The land would be virginal. An innocent Cambodia would be born". It is only when we understand how these words were applied in Cambodia that we can judge the value of such idealism.

Ariane Mnouchkine talks about moments in rehearsal where the whole company broke down in tears because when they were acting was true. The great importance of this work is that the world and the stage achieve a remarkably productive symbiosis. But only time will tell whether it is the unique conditions of the Théâtre du Soleil which make such a play possible, or whether *Norodom Sihanouk* will have a wider influence on contemporary theatre.

The script is stylistically rich. With Shakespearean disregard for the unities the action moves through twenty-five years, from Phnom Penh to Beijing

to be their Holiness. His book *Sihanouk* dealing with the American intervention in Cambodia was the starting point for the script. The process of creation included a meeting with Sihanouk himself and a trip to the resistance camps in Cambodia.

The use of Shakespeare as a model for this play is more original than it might seem. The search over the past three hundred years to imitate Shakespeare's tragic style has been well documented, notably in George Steiner's *The Death of Tragedy*. The influence of the histories is much less noticeable.

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and Paris, and from prose to verse, from dialogue to soliloquy, and from oratory to marketplace chatter. Some moments are particularly eloquent. The first half of part two ends with a verse soliloquy by Hou Yount, a Khmer Rouge general who has been liquidated for lack of resolve. He gives his version of the forced evacuation of Phnom Penh by his former comrades:

This plump man in the black Mercedes. Who, smiling, rides across the poor, haggard people.

Is Leng Sary, filled with hate. Sitting behind him, Pol Pot remains unimaginable.

The two old women have seen the new tyrants of Cambodia pass by. How can it be that they're so fat? they wonder.

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Howard's hues

underpainting and yet, despite the unyielding wood he always used, convey a quite extraordinary sense of depth. The effect is somewhat like a camouflaged door in a library wall. Hodgkin plays with the notion of *trompe l'oeil* and with the relation of art both with itself and with "external" reality. His paintings are full of other paintings (often in rather occult allusion) and of references to other artists - Brancusi, Bonnard, Henry Moore, the Indian painters and textile artists he collects so passionately. Many works are about gardens. "A Small Henry Moore at the Bottom of the Garden". "Interior with a Painting by Stephen Buckley". "After Corot" - refer explicitly to other works; "D. H. in Hollywood" is a version of Hockney's Eric Wilder portrait, with Hockney in place of the original subject. By painting over the incorporated frames of his pictures (by now more than an idiosyncrasy), Hodgkin makes an ironic statement about realism and the nature of painting.

It is significant that while in his native Britain Hodgkin is considered an abstract painter, his American reputation is as a representationalist. He is a slow and unpolished artist, working each piece with prolonged attention and care over several years. For all his concern with the primacy of the picture surface - perfectly in keeping with "flatist" orthodoxy - he only recognizes the process of composition as complete when "the subject" is recovered.

The coincidence of painterly flatness and illusory depth is nothing new, Hodgkin insists, and certainly not as abstract as it seems. It is as old as Raphael and Titian. "Realists" like John Singer Sargent and, at his weakest, Manet cheated by scamping on the work required to balance precisely surface and depth.

Hodgkin's works show little sign of the work of de Kooning - notably in the *Woman* series - and to Pollock -

colour, to undermine the literal and thus contrived illusionism of the image and to create "the kind of glancing, slightly dematerialized quality that one does actually see in reality".

This has become the essence of his work. In his most important single painting to date, "Grantchester Road" of 1975, he has added to a composition remarkably reminiscent of an Omega workshop design his own figure, half-hidden by a black oblong. This perception completely recenters the image, which as his friend Peter Blake has confirmed, is a faithful rendition of an actual house, owned by a friend.

In "Waking Up in Naples", Hodgkin has created a figure as sensuous as anything in the Ingres he admires, using only the surface of the wood unpainted and unmarked except for stains of oil from surrounding areas leaching into the grain. Here, as in painting over the incorporated frames of his pictures (by now more than an idiosyncrasy), Hodgkin makes an ironic statement about realism and the nature of painting.

Hodgkin's use of colour - "Howard's hues" as they like to say - breaks as many rules. Unmixed, heavy, little varied, it still manages to evoke that same dematerializing effect. The overall impact is decorative and robust and, in the portraits especially, it requires an effort analogous to the painter's own to recover the subject; allusion leads to illusion.

There is a superficial similarity to the work of de Kooning - notably in the *Woman* series - and to Pollock -

particularly the undervalued graphic work of 1950-51 in India ink - where figuration is hidden in a "painterly" surface. But Hodgkin shows none of the gestural tics of Abstract Expressionism. He is a classicist with a carefully pared-down vocabulary of forms: arcs, zig-zags, blobs.

The decorative surface combines with an intensely personal subject matter in a way most clearly reminiscent of Vuillard in the *intimiste* period of painting like "La Causette". These can look like abstract formations; at a glance, though, they reveal scenes so particular and directly experienced as to be voyeuristic. This, again, is close to the essence of Hodgkin's painting. His

BOOKS

Songs for the open air

by Bernard Bergonzi

Edward Thomas: a portrait
by R. George Thomas
Clarendon Press: Oxford University
Press, £12.95
ISBN 0 19 185274

Professor R. George Thomas has followed his fine edition of Edward Thomas's collected poems with a definitive and well researched biography of the poet, drawing on much unpublished material. The book is informative, balanced and eminently worth having. Yet there is a lowering quality about it, which arises partly from Professor Thomas's generally pedestrian prose, and partly from the realization, as one reads on, that most of Edward Thomas's life was no more than moderately interesting. There are many extracts from his letters - too many, in fact, for the balance of the narrative - in which the earnest funniest as much in evidence as the visionary. Despite Professor Thomas's best efforts, the personality tends to remain elusive.

What we value is the small but distinguished body of poetry which Edward Thomas wrote during the last years of his life before he was killed on the Western Front in 1917. His career before that was of a hard-working and hard-pressed Edwardian literary man; he was the author of many books of biography, travel and letters, which would surely be forgotten by now if they were all Thomas had left behind him. Professor Thomas makes as good a case as he can for them, but the pre-war Thomas who emerges from his pages is an irredeemably minor figure, attractive but dim. He was sensitive and intelligent, moody and subject to severe depressions and psychosomatic illnesses, which in 1908 were diagnosed by a perceptive doctor as having their origin in what Thomas referred to as his "elaborate self-consciousness".

The most interesting aspect of Thomas's earlier literary career is its symptomatic and representative nature. He was born a late Victorian in 1897, and his dominant literary influences were Victorian: Walter Pater, who left him the legacy of an intolerably mannered prose, until he managed, after much effort, to shake it off; and Ruskin, who remained a positive inspiration and model for Thomas's observations of the natural world. But after the turn of the century he became an Edwardian in a more than merely chronological sense, reinforced by his marriage to the hyper-intense Helen Noble. They shared a belief in eugenics and physical fitness, a reverent agnosticism and a need to be close to nature, expressed in long country walks and an open minded wholesomeness about sex (combined at first with considerable ignorance).

This was very much the progressive spirit of the age, evident, for instance, in the Schlegel sisters in Forster's *Howards End* and their love of an English countryside "which would write Liberal if it could".

Thomas loved rural England and Wales, and he loved English literature; David Garnett remarked that he "admired and appreciated all the poets of the past that I had ever heard of". He was, in fact, what used to be known as a "bookman", who wrote about literature in the discursive manner of Lamb or Hazlitt. His dual interest in books and the countryside is evident in his literary output; he was an early contributor to *Everyman's Library*, for which he wrote introductions to George Borrow and William Cobbett. Thomas's first book, published when he was still in his teens, was called *The Woodland Life*; it had many successors, for Thomas had to write for a living, and in that age of high literacy, when reading was so common a pursuit, he was not short of commissions from publishers. Representative later titles include *Beautiful Wales*, *The Heart of England*, *The Book of the Open Air*, *The South Country*, *The Country*, and *A Literary Pilgrim in England*.

In 1907 he edited *The Pocket Book of Poems and Songs for the Open Air*. Professor Thomas quotes from the introduction to this volume, where the editor claims to have "gathered into it much of the finest English poetry" and "added about sixty of the sweetest songs which it seemed that a wise man would care to sing or hear sung, in the fields, at the inn, on the road at dawn or nightfall, or at home". This is the note of the hearty bookman and it expresses the side of Thomas which is most remote from modern readers. He genuinely loved the countryside and needed to live close to it, but the love expressed itself in ways that can seem inauthentic, and like other writers of the time who made a cult of rural England he overlooked the severe agricultural depression of those years. There is an element of townie pastoral in Thomas's view of nature; and his grave little prose vignettes of salubrious encounters with quaint or striking rustic types embody a very diluted Wordsworthianism.

Fortunately there was more to Thomas than that, as finally became apparent in 1914, following Robert Frost's perception that Thomas was half-way to being a poet in his prose, and that he should take the plunge and come out as one. The influence of Frost, combined with the new consciousness and personal circumstance which followed the outbreak of war, turned Thomas into a poet. Professor Thomas, who has a generally higher opinion of Thomas's prose than I do, thinks that he was already well on the way to becoming a poet when he met Frost, and I am not wholly convinced by this. But there were certainly changes in his sensibility

as he matured, particularly his concern with direct utterance, after he had shed the Paterian influence. Professor Thomas remarks, "the two-way traffic between ordinary speech and the writer's craft had absorbed his attention from early 1908". When Thomas became a poet he had found his own way, helped by Frost, of bringing poetry and ordinary speech together, which had become an evident necessity in the early 20th century, though by a different route from his younger American contemporaries, Pound and Eliot.

It is hard, in the end, to escape the sense of a decisive change in Thomas in 1914. Robert Frost expressed it tersely in a letter to Lascelles Abercrombie in September 1915, saying that the war "has made some sort of new man and a poet out of Edward Thomas". It was also making a new world; Thomas was swept by history out of the regressive, late Romantic attitudes of the Edwardian years, though he still made creative use of the Victorian heritage, notably in his Ruskinian perceptions. His poetry has affinities with both the Imagists and the Georgians, enacting the precise observation of the one and the love of England of the other. Although Thomas was killed in action, soon after his arrival in France, he was not in the obvious sense a war poet, though the war provided a poignant context for his poetry about England; its threatening presence is sensed, if seldom overt. In poetry he achieved the concentration which his prose lacked.

Leavis summarizes Thomas's poetic achievement in *New Bearings in English Poetry*: "He was exquisitely sincere and sensitive, and he succeeded in expressing in poetry a representative modern sensibility". Thomas had moved from one kind of representativeness to another, in his transformation from Edwardian bookman to modern poet.

Bernard Bergonzi is professor of English at the University of Warwick.

Solitary walks

The Complete Shorter Fiction of Virginia Woolf

edited by Susan Dick
Hogarth Press, £12.95
ISBN 0 7012 0643 8

The Secret Self: short stories by women collected and introduced by Hermione Lee
Dent, £3.95
ISBN 0 460 02295 4

Virginia Woolf once noted that it was difficult to look at the figures in a painting without seeing the artist in it. Walter Sickert painting without wanting "to invent a plot, to hear what they are saying". The remark discloses a fanciful side of Woolf's imagination which is apparent throughout the pieces (most of them unpublished during the novelist's lifetime) collected by Susan Dick in *The Complete Shorter Fiction of Virginia Woolf*. Over and over again, the sight of a motionless person - or, in the case of "The Mark on the Wall", object - picks the writer into an effort to turn picture into story.

Sometimes, the effect is deliberately playful: "Nurse Lugton's Curtain" is the kind of fantasy a small child would relish, as too is "The Widow and the Parrot", and the Kipling-esque "Gipsy, the Mongrel" has a lightness of touch not usually associated with Woolf. At other times, the result of the author's speculations can scarcely be called a plot: items like "Solid Objects", the prose poems "Blue and Green", and "Monday or Tuesday", and "The Symbol", a "dream story" on which Woolf was working shortly before her death, are meditations rather than stories, and occasionally Woolf seems to become so intrigued by the lyrical power of words and images that her initial subject is "lost" over. She was fully aware of this tendency, and "An Unwritten Novel", "The Lady in the



Edward Thomas, a sketch by his brother E. H. Thomas, 1905

Looking-Glass: A Reflection", and "The Shooting Party" are all instances of her ability to mock the artist's use of "imagination" as a "tool" with which to "prize open" people and things. The narrator of "An Unwritten Novel", for example, would love to see the woman sitting opposite in a railway compartment as a "symbol of human destiny", and she enjoys wondering about the "entombed soul" of her travelling companion, but events prove this to be harmless nonsense.

Here, and in many other stories, Woolf displays her interest in the problems of realism she so famously debated with Arnold Bennett, but in her fiction at least, there seemed no need to adjudicate between the claims of ordinary reality, rapturous fancies, and profound reflections. What is made to matter is that the imagination has been exercised, elusive truths pursued, activities which, in "Memoirs of a Novelist" are compellingly distinguished from the typical Victorian biographer's concealment of truths under platitudes.

Dissatisfaction with conventions of all kinds emerges too from stories and sketches which depict people struggling to communicate with one another. Notably, it is at parties (occasions which both elated and exhausted Woolf herself) that the ordeal is greatest, as characters anxiously fend "the secluded being", the buried "solid grain of pure self" which can never find expression in conversation. Acutely self-conscious people as outsiders, the "solid grain of pure self" which can never find expression in conversation. Acutely self-conscious people as outsiders, the "solid grain of pure self" which can never find expression in conversation.

Although this useful paperback does not actually include any of Virginia Woolf's short fiction, it does bear out the impression left by her stories and sketches, namely that the supreme value of the short story is its openness to change and experiment.

able here are the themes of Woolf's novels, and in their technique too these stories support Susan Dick's claim (reinforced by her chronological organization of the entire volume) that writing short pieces was essential to the development of Woolf's innovative methods, and to her taste for interior monologue in particular.

Preoccupation with the guilt between thought and speech, epitomized by the lingering Mr Carslake in "A Simple Melody" feels for "pure new words which had never been ruffled and creased and had the starch taken out of them by others' use" never left Woolf. This is also evident in *The Secret Self*. Hermione Lee's personal selection of Woolf's stories is a valuable contribution to the study of Woolf's fiction. The stories are arranged chronologically, and the selection is a valuable contribution to the study of Woolf's fiction. The stories are arranged chronologically, and the selection is a valuable contribution to the study of Woolf's fiction.

Valerie Shaw
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An unassailable expert on chess?

Tony Marsland examines the interplay between computer chess and problems in automated learning

Deep-playing machines are not solely products of the computer revolution, but have a long and colourful history. Perhaps best known is Mr Turk, developed by Baron von Kempelen in the late 18th century, which in various forms and copies toured Europe and America for about 100 years. Mr Turk's popularity testifies to the interest in mechanized chess, but it needed a hidden operator to manipulate the controls. On the other hand, a machine built by the Spanish engineer Torres y Quevedo and displayed at the 1889 exhibition in Paris, was a genuine mechanical player for king-side against king endgames. Despite the success of Quevedo's electromechanical device, however, further advances in chess automata did not come until the 1940s, when several leading mathematicians and engineers saw the possibility of applying to chess the newly evolving power of the computer. For example, Alan Turing in the UK, Adrian de Groot in the Netherlands, Tibor Nemes in Hungary, and Konrad Zuse, a German designer of computer hardware, in Germany. Claude Shannon of the Bell Telephone Laboratories (known for his work on information theory) presented a landmark paper on computer chess.

By the mid-1960s, the science of computer programming was sufficiently advanced to enable John McCarthy, a member of the Massachusetts Institute of Technology (MIT), to arrange a series of telephone chess matches with a program developed at the Institute for Theoretical and Experimental Physics (ITEP) in Moscow. The ITEP program, under the guidance of the well-known mathematician Georgi Adelson-Velsky, won the match, and the scientists involved went on to develop *Kaspar*, which eventually became the first world computer chess champion. In 1967, there emerged the first MIT "another program", *Mac* (for MIT), which boasted substantially more sophisticated intelligence (AI) interest in computer chess - being demonstrably superior not only to all previous programs but also to most casual chess players. By 1970, there was enough interest in computer chess for Monro Newborn, now at McGill University, to organize a computer chess competition in New York that attracted eight participants. Due mainly to Newborn's energetic planning and organization, the event continues today as the Association for Computing Machinery (ACM) North American Computer Chess Championship.

Croom Helm has published a collection of articles on *Cable Television and the Future of Broadcasting*, edited by Ralph M. Negrine, at £17.95.

Kogan Page has published Tom Vincent and Brieda Vincent's *Information Technology and Further Education* at £12.95.

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In 1947, the first World Computer Chess Championship was held at the International Federation of Information Processing Conference in Stockholm. Succeeding world championships have been held every third year - in Toronto, Linz and New York - under the auspices of the International Computer Chess Association; and the next will be in Cologne in June 1986. So far, a new champion has emerged on each occasion: first, the *Kaspar* program from Moscow, then *Chess 4.6* (Northwestern University), *Belle* (Bell Telephone Laboratories) and currently *Cray Blitz* (sponsored by Cray Research). These computer chess competitions are important, and not only because they have forged a strong international network among scientists working on a common problem. They have also provided 15 years of continuing experimental data about the effective speed of computers and their software; and they afford a public testing ground of new algorithms and data structures for speeding the traversal of game trees.

You might ask whether such a problem as chess programming is worth all the cost and effort that goes into it, since chess is, after all, only a game. Donald Michie, a noted AI researcher, believes that computer chess serves as "the *Drosophila melanogaster* (fruit fly) of machine intelligence". Certainly, the problem has all the properties of an ideal experimental medium. It is complex, yet regular and well defined; it is amenable to solution in different ways, and it can serve as a test-bed for new ideas on automated learning. When we consider some of the emerging uses of computers in important decision-making processes, the chess problem is particularly relevant. If computers cannot even solve a decision-making problem in an area of perfect knowledge, like chess, then how can we be sure that they make better decisions than humans in other complex domains, especially those not governed by rules, or those exhibiting high levels of uncertainty? For chess, the rightness of the decisions can be measured objectively, through both the Elo rating scale and standard tests. Another aspect of decision-making, modelled by computer chess is man-machine cooperation - the possibility that a human working with the help of a machine can make better decisions than either alone. Preliminary experiments have shown that computers provide a steady influence and

Taylor Graham has published an *Index to Information Technology* at £20.00. Compiled by Sylvia Peniston, the index covers papers presented in English at major conferences on IT between 1979 and 1984.

Macmillan has published a second edition of *Denis Longley and Michael Shain's Macmillan Dictionary of Information Technology* at £5.55.

Francis and Taylor has published a collection of articles on *Europe and the New Technology*, edited by Margaret Sharp, at £25.00.

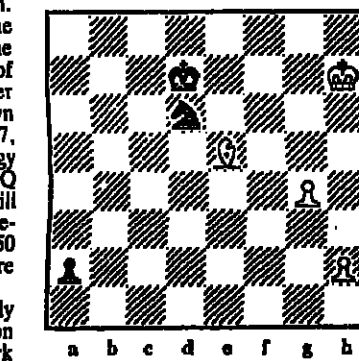
protect against human errors introduced, say, by impulsive short-cuts. Most chess programs work by considering all the available moves in a position (typically about 40). Responses to responses are considered, the process continuing until some maximum depth of search (a horizon) is reached. At a typical three-move-deep horizon (that is, after six "ply" or plays by the two sides) there are 40 to the power of six positions to be examined. The searching process is such that most of these are cut-off or pruned, since it can be proved that they are of no consequence. Even at least a million positions would be considered, and this may still be too many to assess within the target time of three minutes. Thus, although computer chess is mathematically trivial, as a practical matter perfect play is impossible. What is surprising is that some chess programs play so well, considering that they know almost nothing about the game beyond how moves are made. They can evaluate exchanges, recognize desirable patterns, have some notion of king safety and mobility and so on, but each move is considered on its own merits and not as part of some long-term plan or goal. That is to say, they have none of the strategy or goal-seeking skills associated with human intellect. Further, most programs are plagued with problems. Still feared is the "horizon effect" which the program delays any inevitable loss of material beyond its viewing horizon by yielding some lesser loss.

Even the best programs have their bad days. Consider the position below, with white to move (*Belle-Chaos*, ACM, Detroit, 1979). *Belle*, playing white, searches deeply and convinces itself that black is threatening to support and promote its pawn, thus forcing an exchange with the white bishop. Any chess-player (but not *Belle*) would know that such a play is faulty, since black is not left with enough force to win. Nevertheless, *Belle* played P5 in the hope that, by offering a pawn, it would decoy black from its primary threat. In so doing *Belle* loses sight of the promotion, which is pushed over the horizon. Black happily accepted by forking the bishop and pawn with N7, and the game was quickly drawn. Instead of being an easy win for white. On other occasions, however, *Belle* has shown great originality. At Toronto in 1977, the program presented a new strategy for defending the lost ending KQ versus KR. Although the ending still favours the side with the queen, precise play is required to win within 50 moves, as several chess-masters were embarrassed to discover.

Computer chess has consistently been in the forefront of the application of high technology. In New York

(1983), one program (*Ostrich*) used a network of eight Data General processors, while the winner (*Cray Blitz*) had access to possibly the world's most powerful computer, a four-processor Cray XMP. Some programs used special-purpose hardware (for example, *Belle* and *Rebe*) and there were a few experimental versions of commercial products. Behind the scenes in the commercial world there are many developers of computer chess software. Major players are Fidelity Electronic of Miami, Hegener & Glaser of Munich, Intelligent Software of London, and Novag and SciSys of Hong Kong. Particularly for the benefit of these and other vendors, a series of restricted entry World Micro Computer Championships has been held. Unfortunately, however, these events have been marred by disputes, because so much advertising potential hinges on the outcome, but the competition has led to dramatic improvements in programs over the years. Today the best microprocessor-based systems can compete satisfactorily in open competition, although it is unlikely that one will ever win the title of World Computer Chess Champion.

While many of the programs owe their improvements to faster computers, software advances, though gradual, have been equally important. Such techniques as iterative deepening (progressively seeking longer and longer lines of play), principal variation search (analysing the main continuation more thoroughly and using it to refute all alternatives), the killer heuristic (trying previously successful moves before all others) and the use of transposition tables (special memory tables recording the outcome of positions seen before), are now in common use. Work is continuing on robust selective search methods (the retention only of moves that are consistent with some theme), and to a limited extent on plans to achieve well-defined goals. Hardware advances also continue, and there are major efforts to install chess programs on machines with thousands of processors. If successful, this could be a superb example



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1 Tony Marsland is professor of computing science at the University of Alberta, Edmonton, Canada.

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Investing in
the futureAlan Gordon calls for the closer matching
of manpower supply and demand

The past two years have been characterized by frequent public outbursts from companies employing manpower skilled in information technology that their skill needs were not being met. Company personnel staff involved in recruitment often report finding it difficult to fill vacancies for computer programmers, systems analysts, micro-electronics design engineers, semi-conductor design engineers, computer-aided design draughtsmen and other IT staff. Salary levels of IT manpower have continued to increase faster than most other groups of professional and technical staff. "Head-hunting", "poaching" and the use of specialist recruitment agencies all seem to be on the increase, as companies seek out experienced staff. Problems of turnover of both experienced and recently trained staff, and the difficulties of replacement, have re-emerged as a significant, time-consuming activity for company personnel specialists.

Two key reports, 1984, from the Department of Trade and Industry's IT skills shortages committee (*The Human Factor: the supply side problem*) and from the National Economic Development Office (*Crisis Facing UK Information Technology*), drew attention to the existence of current and anticipated future shortages of manpower skilled in IT. Further confirmation has come from a number of reports from the Institute of Manpower Studies, drawing attention to an apparent mismatch, at the highly qualified manpower level, between the output of graduates and postgraduates qualified in IT-related subjects and the demand by employers for their skills. Recent research by the Department of Employment on the demand for technical graduates, however, has been rather more circumspect in its conclusions.

Much of the work on IT skills shortages has been employer-based, concerned with current employment levels, recruitment plans, unfilled vacancies and salary movements. At the qualified manpower level, because of the time-lags involved in producing those with graduate qualifications, employers have been asked to anticipate future recruitment levels. Indeed, the report from the DTI's IT skills shortages committee contained information on the graduate requirements of eight major electronics companies some five years ahead, who anticipated increasing their recruitment of computer science graduates from 852 in 1984 to over 1400 by 1989, an increase of two-thirds. This year the British university system produced 1,400 "home" computer science gradu-

ates in total. The Council for National Academic Awards added a further 500. One thousand additional electronics engineers would also be "required" by these companies alone. Statistics like these have fuelled concern that the development of IT in Britain was being hindered by a paucity of IT specialists. This, in turn, had the effect of influencing the Department of Education and Science to shift resources to IT education and training. It has also lent weight to the argument for basing at least part of the planning of higher education on the nation's future need for IT personnel.

Relating the output of the higher education system to the labour market needs of the British economy was largely discredited in the 1960s and 1970s. Nowadays, with only a small number of subject area exceptions — for example, medicine and education — greater reliance is placed on guidance and counselling, on the generally restricted supply of places, and on the influence of market signals (for example, graduate unemployment rates, starting salaries) as ways of affecting students' subject choices. The "pressure group" publicity associated with the IT lobby seeks to make IT education and training a further exception, at least implicitly.

But the evidence that any existing mismatch can, or even should, be corrected by manpower planning is uncertain. To term the forecasts from the graduate requirements for 1989 "guesstimates" would be too complementary. Requesting employers to give details of future graduate (or any other) recruitment has an intuitive appeal for its simplicity, but the reliability of such a Delphic inquiry is open to serious doubt. Asking employers questions of this kind assumes that they do make longer-term forecasts of market shares, industrial growth, technological change, manpower requirements, and a host of other economic, technical and social factors that will affect their business performance. In addition, unless employers are asked for information about employment levels and recruitment at varying wage-rates, these forecasts cannot be considered forecasts of manpower demand. A further complication is that a high proportion of IT specialists are employed in defence-related work, where future employment levels are especially difficult to estimate, because of uncertainty over future contract work, currency fluctuations, the policies of overseas governments, and British public spending constraints.

In short, over-reliance on the views of employers about British requirements for manpower skilled in IT can easily lead to mistaken, and usually overly pessimistic, estimates of mismatch. There are also other reasons why policy moves should stop short of embracing any variation of manpower planning for IT education and training.

If the cost of any expansion in IT education and training, or shift in the allocation of resources to the benefit of IT, is to be borne by the state, then it is in the clear interest of companies to press for expansion. In order that recruiting firms can select from among a decent-sized pool of applicants, over-supply will always be preferred to matched or under-supply. If, however, the employer's own resources are to be used in IT education, training, retraining and making the most of manpower substitution possibilities, then clearly any internal company manpower planning exercise will be much more systematic and comprehensive than simply providing pat responses to manpower researchers or government departments.

Among commercial and other IT user companies, some employers are already recruiting staff with the propensity to benefit from in-company training rather than the fully fledged specialist. They are increasingly finding that they do not necessarily require staff who have spent lengthy periods in IT-specific higher education.

The training of new recruits and the retraining of existing employees is given much less attention in Britain

than in other developed countries: this is as true in IT as in other subjects. A recent survey estimated that in 1984 the private sector of industry spent on average £200 per employee a year on training — representing just 0.1% of turnover. This training cost compares unfavourably with the retraining cost being devoted to employee education in other industrial countries, including France, the Netherlands, the Federal Republic of Germany, Japan and the United States.

The benefits of retraining, particularly for electronics, have been urged in recent reports from NEDO and the MSC. The costs of retraining need not be high, and the benefits, according to the short, medium and long terms, can be substantial. The recent NEDO report *Retraining for Electronics Skills* concluded that "A failure to invest in training and change is... a failure to invest in the future." And yet a number of the companies which have been vociferously about IT skills shortages have been doing comparatively little in the way of extra investment in training and retraining. There is a strong argument that they could do much more themselves to remedy any existing IT skill deficiencies. Retraining initiatives, once embraced as part of a continuing company activity, lead to a more flexible and adaptable workforce, enabling full advantage to be taken of subtle changes in technology and market possibilities. Retraining for IT can take place as an individual company activity, as part of a local labour market consortium, or as part of a Professional, Industrial and Commercial Updating Programme (PICKUP) or Open Tech scheme.

The aim of PICKUP, launched in May 1982, is to encourage education and training institutions to provide relevant courses for those in work, with a particular emphasis on post-experience updating courses. In its first year, the PICKUP initiative funded 17 larger and over 100 smaller scale schemes, many in IT. Examples of the larger projects include a scheme to tackle Britain's shortage of computer software engineers and an advanced manufacturing techniques training programme.

Over 60 projects have been started under the Open Tech scheme, which aims to promote training and retraining opportunities for employed adults, at management, technician and supervisory levels. The particular feature of Open Tech is that it uses open and distance learning methods such as home study texts, video and audio tapes. A priority has been technological updating in subjects such as robotics, microelectronics and IT. About 6,000 employed people participated in Open Tech in its first year; by 1985 it is expected that the numbers involved will increase to about 50,000 employees. The Open University also offers relevant courses in IT to those in employment.

Although it is clear that many employers are changing their attitudes to training and retraining in IT, the pace is slow. For some, it seems easier (and cheaper) to press for a substantially increased output of IT specialists from higher and further education. In fact, the remedy for any existing IT skills shortage problems is partly if not wholly in companies' own hands. We have been witnessing an IT lobby in action, not so very different from the science and engineering lobbies that were active in the 1960s and 1970s.

It would be a dangerous course to allow highly unreliable labour market forecasts to determine the allocation of resources both outside and within higher and further education, based as they are mainly on employers' guesses of future requirements for IT manpower. Given the time-lags and uncertainties involved in linking graduate output to stated employer requirements, the constraints on public expenditure for all purposes including education, the vagaries and shifts in manpower demand, and the training, retraining and substitution possibilities that have yet to be explored, taking company complaints at face value is too simplistic an approach. In addition, rationalizing organizations would always prefer over-supply to under-supply, especially where, as in IT, training can be expensive. These factors lead to the inevitable conclusion that we should hesitate before according to the IT lobby's demand for further expansion of full-time courses in higher and further education.

Alan Gordon is lecturer in social policy and economics at Royal Holloway and Bedford New College, University of London.

Drafting
digital mapsDavid Rhind assesses the merits of converting
the Ordnance Survey to digital form

Maps are far more than wallpaper. They usually have two functions beyond that of displaying information in a spatial context. Topographic maps, in particular, are substantial stores of data on the physical and built environment. A typical Ordnance Survey (OS) 1/50,000 scale map, for instance, can provide a 1,000 x 1,000 matrix of shortest distances between all places shown therein. Since that OS map forms part of a national series, it also contributes to the equivalent matrix of distances between all 290,000 places shown on the OS maps at this scale.

Another important but often disregarded function of maps is to act as an index or as an access pathway to other information. Hence, the utilities (gas, electricity, water and telecommunications) all keep up-to-date sets of large-scale OS maps covering the whole country, on which they record their networks. Access to details about their local plant (pipe sizes, detailed location of breaks in the network, and so on) necessarily involves use of maps.

Britain is distinctly unusual in its topographic map coverage. For a variety of reasons but partly because of our property registration system, we maintain comprehensive and consistent maps at very large scales. Now, following on from the recommendations of the 1938 report of the Davidson Committee, OS have virtually completed the remapping of the country. This has involved creating 220,000 different maps, the replacement cost of which has been estimated at about £500 million. All areas other than mountain and moorland (which cover 30 per cent of the land area) are mapped first at 1/250 or 1/2,500 scale; and remote areas are mapped at 1/10,000 scale.

From these detailed surveys, most of the other, less detailed maps are derived. As the task facing OS now is to keep these up to date rather than to create wholly new maps, about 1,000 surveys are constantly updating the maps. By contrast, in the United States the largest scale of complete coverage is 1/62,500. In fact, many of these maps are more than 30 years out of date and a crash programme to produce new 1/100,000 scale mapping has been launched. Hence, the best United States national mapping is a linear factor of between 10 and 80 times less detailed than that of Britain.

Given this massive investment in traditional paper maps, why should the OS suffer the costs and pain of change by converting all these maps to computer form? For short-term internal purposes, computerization may have few benefits for the Survey; indeed, the cost of converting maps into machine-readable form (digitization) is presently 10 to 20 times that of manual redrafting. In the medium term, the ability to update only parts of the map and to get the machine to draw out the whole of the new version promises manpower savings. But the real rationale lies outside the OS: users of topographic maps — especially the utilities — are rapidly moving towards the use of digital systems and need digital OS-type data to form part of those systems. Other potential users include those selling car navigation systems. Philips are about to launch an in-car system in Europe; and an American system on which it is based is already on sale in the United States for \$1,600, with cassettes of road network data costing about \$35 per city. Taxi firms, emergency services and delivery services in Britain have already expressed considerable interest in such

facilities which are totally dependent on the availability of digital map data, suitably organized and kept current. These are only specific examples, however, of what digital mapping can offer the user. If the system is well designed, maps may be produced at a variety of scales and covering an area to suit the task: frustration at finding an important location at the junction of four map sheets need never occur. Maps can be produced on any algebraically-defined map projection — this is important, as different map publishers typically use different projections (for example, the OS and those publishing offshore mapping). Customized maps may be produced by selecting only those features of relevance (topographic maps are inherently a multi-purpose and often cluttered as a result). Experiments are readily made to find the best symbology, since only computer time rather than people's wages is involved. Behind all this, of course, is the dramatic change in capabilities wrought by developments in microelectronics, notably in terms of cost — to carry out a specific operation now costs about one-tenth of what it did at the time of the first British experiments in digital mapping.

Beyond the making of up-to-date maps by use of the computer or even of superimposition on a visual display unit of OS and utilities data, the greatest rationale for converting all OS maps into computer form is to make available the data which are locked up therein. Extracting such data as street gazetteers, road distances or three-dimensional models of the land surface by hand is tedious, error-prone and expensive. Yet some applications of these are already becoming routine, such as the Ministry of Defence's terrain simulations for training aircraft in low flying. Potentially the greatest value comes where multiple data sets have to be linked together, and as often happens the only way to do this is via the geography of the areas to which the data relate. Here the use of medical data is a useful example: only by linkage of "mortality by cause of death" data to demographic data from the Population Census can assess-

ments be made of whether incidence rates are anomalous. Moreover, these are only meaningful if carried out for geographically small areas. Such comparisons are facilitated by the increasing availability of much data collected through routine administration in computer form. At present, however, these linkages can only be achieved through the spatial framework provided by the OS.

So what has the OS been doing about providing maps in computer form? Their involvement began in 1968/69 when they took part in experiments on their maps carried out by the then Experimental Cartography Unit, funded by the Natural Environment Research Council. By 1971, the OS had gone their own way and devised a computer system to produce paper topographic maps, that is, to replicate existing products using new technology. It is claimed (with some justice) that this course of action was forced upon them by the short-sightedness of customers and of the government, who would not finance experiments which could lead to new markets. Indeed, the first OS computer-controlled plotting device is claimed to have been justified on the basis of drawing histograms for management statistics, although its use was speedily diverted. In 1973, a pilot production line was set up to produce large-scale maps by these means; and to date some 25,000 maps have been converted. All of these have been vector maps — that is, stored as lines or points, each with a label denoting the nature or graphic form of some feature. The method of conversion into machine-readable form has essentially been manual, with an operator guiding a cursor down every line and coordinates defining the geometry being stored on tape or disk.

If the mainstream of OS efforts has been to create an in-house facility for their own purposes, the external user has not been forgotten. OS digital maps are now available on tape for a cost of £50 each (or about four times the cost of paper equivalents). Between 1974 and 1979, the OS and the Department of the Environment financed a major project to reorganize by software the OS files, which are primarily suited to making pictures rather than to manipulating the under-

lying data: existing OS data are only bundles of lines and points, without any relationships between them. Hence, street names are not linked to the lines comprising the street, the lines making up the sides of a house are not linked together in any way; indeed, the concept of an area was unknown until very recently in OS data. The project, then, was designed to recreate data in which the entities (such as land parcels) were those needed by external users such as local authorities, rather than what was convenient for the digitizing operator and necessary for the requirements of OS drafting. Unhappily, it was an almost total failure, the only worthwhile products being an awareness of the difficulty of post-hoc "fixing" and a set of "restructured" map sheets produced (very late) for Dudley metropolitan borough's Local Authority Management Information System (LAMIS), a coordinated information system for local government originally set up by the Department of Trade and Industry and ICI.

In 1978, the then Labour government set up an inquiry into the future of the OS which reported to a Conservative government 18 months later. Because the new government was not entirely happy about the terms of reference set by its predecessor, no formal acceptance of the recommendations in what has come to be known as the Serpell Report was announced until five years later. Those on digital mapping included the setting up of a programme for completing the digitization of all large-scale maps and also that of the 1/50,000 scale maps — after an assessment of user needs. Other recommendations included a search for cheaper, more automated and faster methods of digitization. Serpell particularly urged collaborative research and development work with universities. A number of these recommendations were echoed and extended by the House of Lords select committee on science and technology which reported on remote sensing and digital mapping early in 1984.

The results are significant but not ideal. Better methods of digitization and interactive map editing have certainly been devised. Field stations now

continued on page iv

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Basil Blackwell

Entry requirements

Peter Frogbrook helps students negotiate a maze of possible courses

In order to improve the level of information available to students about opportunities in further and higher education, the Department of Education and Science set up the Educational Counselling and Credit Transfer Information Service (ECTIS) in 1983. At the time, particular emphasis was placed on the signposting of alternative routes into higher education. Now, nearly three years on and with some 30 years of effort invested in building a database, the development programme is well on the way to satisfying these objectives. Using some of the latest information technology, ECTIS can provide easy access to the information which can help both school-leavers and adults planning to continue their studies.

ECTIS arose out of a concern that many students were not readily finding their way through the complexities of the higher education system. Indeed, high incidences of drop-out indicated that they did not have access to sufficient information to enable them to choose the courses which best suited their needs. Moreover, the educational scene was changing rapidly: there was increased variety; and modular courses were becoming more important. And the growing requirement for updating and development in professional and technical careers brought with it the need for more information about opportunities for credit transfer - the acceptance of non-standard qualifications for entry to, and transfer between, courses either at initial level or in mid-course with advanced standing or exemptions.

A contract to design and implement a pilot ECTIS was awarded to the Open University. The design brief called for a computerized system capable of providing a national coverage and meeting the needs of students, their advisers, professional bodies, employers and the educational institutions. The timetable specified that a pilot service should be operational quickly in order to maximize the accumulation of experience. The database was built by extracting from prospectuses a brief profile of each course, and these are being progressively updated and expanded. At present, the records include the name of the institution, the full title of the course, length, mode of study, validating body, Universities Central Council on Admissions or Polytechnics Central Admissions System code, and the usual entry requirements.

Next year will see further additions, including some data on the structure, assessment method and the principal components of the course. Among the data being collected on credit transfer are details of alternative qualifications in place of the normal A levels, which may be accepted for entry, and opportunities for mature students. Some of this, together with recognition of educational qualifications by professional bodies, will also be transferred to the main database in 1986. At present, the database holds records of 17,500 full-time and 7,300 part-time courses, including taught postgraduate, first degree and other advanced courses offered throughout Britain. Non-advanced courses, which lead to a recognized qualification, are also held for the pilot area of south-west England. Over the next two years, this project will be extended to cover the whole country, bringing the database to around 80,000 courses. Keeping the data up to date is clearly vital if the service is to be useful. So far, the response of correspondents (appointed to deal with ECTIS at each educational institution) to requests to check the data has been most encouraging. It is to be hoped that institutions will come to regard part of the database as an extension of their own information service and, as such, be concerned that it is maintained accurately.

The database is stored on the Open University's Sperry 1100/82 dual-processor computer which provides a high level of reliability and can support a large number of simultaneous users. The database is maintained by Sperry's Unidas database management system,

Records can be retrieved through keywords, each record having been classified using around a dozen keywords. Searching is further enhanced by a powerful thesaurus facility which provides a structured relationship between the keywords. At present, the working thesaurus contains approximately 2,000 terms derived from a much larger Educational Courses and Occupations Thesaurus (ECOT) developed for ECTIS by a thesaurist expert.

Having built up the large database, our next task was to make it available to the widest audience at the cheapest cost. As a major objective was that it should be directly accessible to students and the guidance agencies, we concluded that microfiche and on-line access through viewdata offered the most satisfactory solutions at this time.

Microfiche was seen as leading on to a microcomputer-based system around 1988, when it was expected that cheap high-density storage would make it a viable proposition. In addition, from January 1984, a service to deal with inquiries by letter and telephone has been available from information centres at Milton Keynes and Bristol. The Bristol centre, established in cooperation with the Avon Local Education Authority, also caters for personal callers and runs a service for schools in the area.

Computer output directly on to microfiche (COM) offered a particularly cost-effective medium for conveniently bringing the vast amount of information to libraries, careers services, school careers rooms and to many other guidance services. The ECTIS microfiche service is now available through annual subscription, which covers two full updates each year plus further additions as and when necessary. Viewdata offered the attractions of being cheap and easy to use and already widely available in schools, educational institutions and public libraries. Microcomputers can be cheaply converted into terminals, thus substantially increasing the potential access points. A survey showed that Prestel offered the best coverage, with 98 per cent of telephones throughout Britain able to call at local rates. However, as its limited database system was not suitable for ECTIS users, we decided on a gateway solution as a means of linking the ECTIS computer to the Prestel network. In partnership with Prestel and the Council for Educational Technology, and with the help of Sperry, ECTIS has developed a system which now enables inquirers to search the main database while retaining the "user-friendly" interface normally associated with viewdata.

The ECTIS viewdata service is now available through Prestel. Next year the service will also be available through the Packet Switching Service. Although currently ECTIS is not itself charging for on-line access, subscription and frame charges will be introduced in 1986. Following the traditions of viewdata, it should be possible to make an inquiry without training or prior instruction. Two input screens prompt for the search criteria. The second of these is varied depending on what is entered in the first. Menus offer choices of level, mode of study, type of institution, and area of the country. Up to four options may be chosen from each menu.

The subject and, where a specific town or country is required, the area, are entered as free text. Here again, searching is made easier by the ability to enter a number of subjects and areas in the same search. However, although free text input presents the user with the task of introducing appropriate keywords, considerable help is at hand from the thesaurus. First, all courses are grouped so that those with exotic titles are not missed out. Second, these groups can be accessed through a wide range of alternative keywords - for example, robots would be automatically changed to robotics, computing or computers to computer studies. In future, we should see an increasing use of this facility - for example, to link occupations to courses. Keywords which are not recognized at all are

recorded for possible inclusion later and the inquirer is presented with an alphabetic list of likely terms. If a suitable term appears in the list, it can be chosen by its menu number. If not, it is possible to move to another part of the list. It is also possible to explore the thesaurus for broader, narrower or related terms and to include these.

The link between the viewdata system and the main ECTIS database is provided by a series of small transaction programs which are called by the viewdata frames. These collect the search criteria and initiate the database search. The number of matches is displayed and the inquirer has options to amend the search criteria or see a list of matched courses. For each entry in this list there is an option to see more details. Browsing is made easy because after looking at the details of a course the inquirer is returned to the same point in the course list.

Such a combination of bibliographic database, viewdata system and thesaurus linked by small transaction programs suggests that many of the difficulties which have so far prevented viewdata reaching its potential in providing the person-in-the-street with access to vast stores of information, could be overcome. The system eases the task of the information provider and reduces for users the need for tedious menus.

Cooperation and collaboration with other agencies have always been high on the list of ECTIS priorities. Although the ECTIS database will be extensive, it will form only a part of the broad base of information and support services which are needed. It is important that developments taking place now and in the future seem to be coherent to the user whose needs will rarely coincide completely with the discrete offerings of any one information source.

Because the ECTIS database and course records can hold data provided from different sources, the opportunity exists for other agencies to contribute to it. Already work is in hand to add the Professional, Industrial and Commercial Updating Programme (PICKUP) Short Course Directory,

which is maintained by Guildford Educational Services; and a number of professional bodies and other agencies have expressed interest in adding further data. In future, it is expected that courses with vacancies will be indicated together with the expected grades.

ECTIS will also be related to other developments, such as the recent DES-funded Computer-Aided Careers Guidance System (CACGS) for guidance agencies, plans are being laid to develop information resource centres - basically microcomputer-based - to hold data of local interest, such as courses not leading to specific qualifications, and informal educational opportunities. These agencies will support the guidance programme and provide facilities for printing the results of searches.

In September of this year, the DES gave its approval for ECTIS to be developed into a nationally complete and highly accessible information service for educational guidance. Technology will thus make the information easily available in every variety of location, even the inquirer's own home. ECTIS may have major long-term implications for guidance workers. By freeing them from information collection and searching, it will enable them to concentrate their scarce resource on interpersonal aspects and to deal with a larger number and wider range of clients.

At a time when the education system is coming under increasing pressure to become more flexible and to satisfy the increasing demands for more specialist and tailored courses within strict financial constraints, ECTIS should help students make more effective and efficient use of the varied opportunities presented to them by further and higher education.

Peter Frogbrook is director of ECTIS. For further information, please write to ECTIS, P.O. Box 88, Walton Hall, Milton Keynes MK7 6DB, or telephone 0908 368924, or contact Prestel mailbox 908711301.

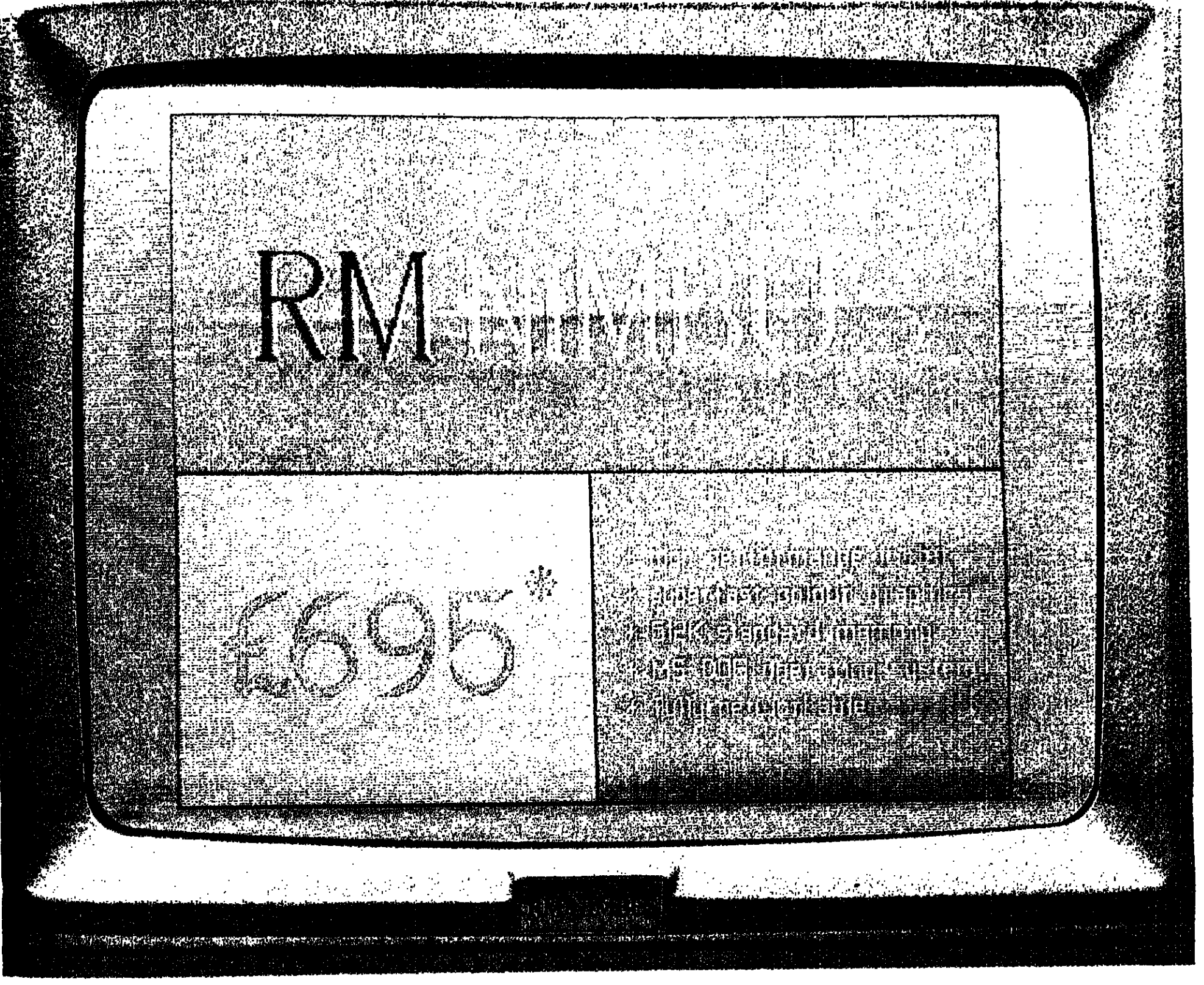


"Your carburettor's way off. Your valves are so-so. Your VISA balance is just fine", one of a collection of cartoons by Eldon Dedini in *A Much, Much Better World* (Microsoft. £6.95).

continued from page 111
at the experimental stage will enable the surveyor to digitize his updates and transmit them to a central database. Work has begun on defining national data transfer standards and on reassessing the OS data structure. Research continues on mass digitization systems capable of scanning thousands of maps and then generating high-quality vector data from the results. But major difficulties persist. While the Lords urged that an acceleration of the large-scale digitization programme be set in train to finish the work in 10 years and utilities are now talking of five years as the limit of their patience, government has said only that this will be complete by 2015. This is in marked contrast to the situation in Northern Ireland where an integrated topographic and environmental database will be complete by about 1990. Moreover, little work has been done in regard to creating digital 1:10,000 or 1:50,000 scale maps; and this is doubly significant. No altitude information is present in the existing digital maps which are all taken from the 1:12,500 and 1:25,000 scale maps. For the academic and research scientist (and for many in map series are far more useful than those required by the utilities: geologists, for instance, usually map at 1:10,000 scale and need the third dimension. So far, no timetable has been established for making these data available. Concern is also rife about the likely level of charges for the

purchase and use of the Crown copyrighted data, even if only used for research purposes. (The OS have now informally invited the universities to submit a joint proposal to cover such use of their digital data.)
If getting a comprehensive model of the topography of Britain is still some way off, routine use may be even more remote. Holding data derived from both large-scale and small-scale maps will produce an on-line and frequently updated database of the order of 20 gigabytes. Access to it needs to be rapid and cheap, hence requiring ubiquitous and inexpensive telecommunications. It becomes increasingly clear, then, that software to reorganize, manipulate and integrate OS and other data will need to become much "smarter" than the Fortran programs used to date: the creation of knowledge-based computer systems and aid in the automatic recognition and labelling of features, in correcting inconsistencies between digitized map sheets and in the approximate matching of data, seems inevitable and necessary. Inevitably, the academic community and the OS now have a closer collaboration than in the past. Research funded by the OS in Birkbeck College, in Edinburgh, Hull and Glasgow, in University College London, and in North East London Polytechnic is contributing to what will be the core of a national land (and possibly, property) database.

David Rhind is professor of geography and coordinator of information technology at Birkbeck College, London.



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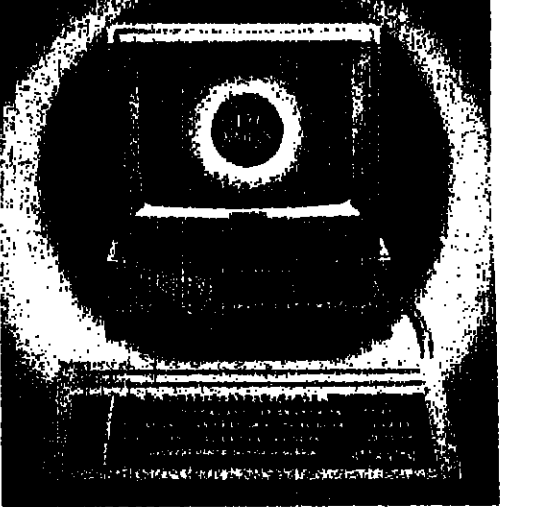
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BOOKS

Health diagnosis

Assessing Health Care: a study in organizational evaluation by Gilbert Smith and Caroline Cantley. Open University Press, £22.50. ISBN 0 335 15072 1. Initiative and Inertia: case studies in the NHS by Barbara Stocking. Nuffield Provincial Hospitals Trust, £8.75. ISBN 0 900574 50 X.

Fifteen years ago there were very few published evaluations of the National Health Service, its institutions or processes. Now that has changed, though the burgeoning evaluation literature is dominated by economists. These two texts are a welcome addition to the recent – and still modest – corpus of organizational and sociological analyses. Both books explore subtle aspects of organizational life which economists' models of "input-output rationality" simply fail to capture. Neither has direct "competitors", such as the topic where current texts are lacking. Smith and Cantley offer a detailed study of the first three years of a new Scottish psychiatric day hospital. From this, and a brief review of the literature on health services evaluation, they propose a new approach to the assessment of such services, an approach which they term "plurilateral evaluation". Stocking, using "innovation" as her central concept, studies four NHS innovations in depth and a further 18 in outline. Relating her findings to general models of innovation – drawn mainly from studies of the private sector – she tries to identify those characteristics which may help (and hinder) the diffusion of new ideas and practices.

Smith and Cantley are perhaps marginally smoother in crossing the bridge between the general findings of other writers and the implications of their own detailed research. They are also rather more daring in their exposure of the immense professional paternalism that remains characteristic of so much of the NHS. Stocking is more "reserved", making less use of direct quotations from staff, and refraining from any too critical observations, even when her evidence clearly points at professional self-interest as a major hindrance to change.

Central to the Smith and Cantley book is an exploration of the various criteria of "success" used by the different groups involved in caring for those suffering from psychogeriatric illness. The authors tense out these different criteria, not only from consultant psychiatrists, nurses and social workers, but also from patients' relatives. (With a more articulate group of patients, presumably they themselves would have been asked.) Thus, for example, many administrators, nurses and consultants placed considerable emphasis on the day hospital's role in reducing the demand for in-patient beds in the neighbouring long-stay hospital. Many relatives, by contrast, saw success partly in terms of relieving the relentless demands made on them; that is, they hoped that the day hospital would serve as a stepping-stone to full-time care. Again, for some staff, clinical cure, or at least improvement, was a main aim. Smith and Cantley suggest that this may sometimes be a "diversionary ideal", that cure may be pursued where it is not a realistic possibility, thus diverting energies from working for other kinds of "success" (relieving the strain on relatives; reducing a patient's anxiety).

One feature of particular interest was a relatives group. Officially, this group was created by staff, (after initial resistance from administrators) to provide support and advice for relatives, and was an important symbol of the hospital's "progressive" approach. It met regularly, with nurses and social workers present. Cantley and Smith show how, while the group undoubtedly did deliver support, it also came to be used as a kind of safety valve, confining relatives' questions (and expressions of distress) to one, isolated locale. In this way the routine working of the hospital was to some degree protected from "relative disturbance".

According to the dust jacket, plurilateral evaluation is a "radically new approach". Radical, perhaps, but new it is surely not? Medical sociologists have been documenting how different groups – especially patients – have different perceptions of appropriate care and care for a least a quarter of a century. Smith and Cantley are hardly the first to acknowledge this diversity. To build it into a regular official system of evaluation would, however, be truly radical. Too many claims to authority to know "what is best for the patient" even the monolithic authority of medical "science" might then be put in jeopardy. Smith and Cantley have helped substantiate the idea that more open-ended, multi-dimensional evaluations are possible. It is a pity their message has yet to reach those in the Department of Health and Social Security who recently issued the 1985 set of NHS performance indicators. The concept of evaluation they incorporate is monolithic rather than plurilateral.

Barbara Stocking suggests nothing as radical. Acknowledging that the NHS may not have a particularly good record at "managing the innovation process", she appears to place her faith for the future in general managers as recommended by the Griffiths report.

Just how they will cut through the tangle of interlocking occupational groups, each with its own interests to protect, is not entirely clear. The possibility of speeding effective innovation by strengthening the influence of patients and their relatives is scarcely discussed. Nevertheless, Stocking's analysis, couched in the fashionable terminology of "managers" and "product champions", is clear and informative.

The importance of organizational politics – especially local organizational politics – shines out. The most rapidly-diffusing innovation is likely to be a machine, which "adds on" to existing equipment, does not disturb organizational roles, is expensively marketed by its manufacturers, and is favoured by top consultants in a glamorous specialism. Electronic foetal monitoring would appear to have been one example. By contrast, increasing day surgery (one of Stocking's four main cases) lacks most of these characteristics. Its spread – despite encouragement from the DHSS – has been patchy. In a second example, integrated programmes of health education directed at the problem of Asian rickets, the co-operation of many groups was a precondition of success. The treatment itself was relatively simple. But it took almost 20 years to get GPs, health visitors, paediatricians, community leaders, and community relations officers to pull together in an effective campaign. Changing patient waiting times proved similarly intractable – it disturbed hospital routines and threatened the professional relationship between doctors and patients. Confirming other, more self-consciously political analyses, Stocking shows how misguided would be any attempt to explain what happened in the NHS in terms of a straight chain-of-command from the political claims at the DHSS. Not only doctors, but the immense variety of other occupational groups in the NHS, can deploy a range of techniques to resist that which appears to threaten their customary territory.

Perhaps the next step, prefigured in some of the author's own remarks, would be to study the characteristics of the groups rather than the characteristics of the innovations. If Barbara Stocking could integrate such an analysis with her existing work, it would be well worth a further volume.

Christopher Pollitt

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American welfare

The Altruistic Imagination: a history of social work and social policy in the United States by John H. Ehrenreich. Cornell University Press, \$24.50. ISBN 0 8014 1764 3.

Social work is a serious business, as recent well-publicized cases have amply shown: lives depend on it; when things don't go right children and the aged may die. It is also, however, the most introspective of professions, and as Ehrenreich demonstrates in his account of the history of social work in the United States, decades of navel-contemplation have produced considerable wisdom and nobility of action interspersed with bouts of almost unbelievable silliness of word and deed. And this is not peculiar to the United States: there is much in this account that will seem immediately familiar to British social workers.

Ehrenreich sets out (as his subtitle suggests) to examine the development and history of social work and its relationship to developing social policy, and to set both in the context of major social, political and economic changes since the late 19th century. The account of social work's development out of charitable and reformist movements, its growth as a profession, its increasing professionalization, the formulation of social work practice and training programmes, and its periodic shifts of ideology, are all well documented and detailed. If you wanted a history of social work in the United States, then here is a good source.

The author's attempt at placing this history in the context of social policy and more general social events is only partially successful however. The problem I suspect is that in juggling with three balls, social work, social policy and broader historical events, it has not been possible to sustain all the links and connections involved. Unfortunately, it is the theme of social policy that has suffered (unfortunately because

it is the links between social work and social policy rather than with broader historical events that is the alleged concern of the book). So, while it is able clearly to demonstrate the connection between major historical events and shifts in social work thinking, Ehrenreich has not been able to show any consistent pattern of relationship between social work and broader social policy (as he himself describes it) including education, health and income maintenance provisions. This is a shame because what seems to be of crucial importance for social work is its actual and perceived place and function in a welfare state and welfare society. (The author does show for example that social work had a place – and space – in the New Deal welfare state but that the welfare reforms of the Great Society era left it out in the cold.)

Just as in Britain, social work thinking in the United States has always oscillated between an emphasis on casework on the one hand and social or community action on the other, with it should be added, many sub-themes. Ehrenreich demonstrates the not surprising fact that the two periods of greatest emphasis in the profession on social action and reform, other than the period of its birth, coincided with the two great social upheavals of the century – the great depression and the burgeoning radicalism of the 1960s. Social work was clearly infected by the spirit of the times and the radical critiques caused much soul-searching within the profession. But doesn't this say something about social work as a profession – that it can allow itself to be bobbed hither and thither on the waves of fashion? It is at points such as this that one wishes Ehrenreich had been a little more critical of the profession he describes and its culture.

It is at times when the pendulum is at the extremes of its arc of casework or social action that social work introspection becomes most intense. Reading Ehrenreich's accounts of the profession's internal debates however, one is left with a feeling of (at times) intense self-indulgence such as is rarely present in other professions. There is much debate about what the social work profession ought to be doing, but precious little about what the clients might want.

The dichotomy between casework and social action, which I suspect, remain an internal bone of contention for the profession both in the United States and Britain. Certainly, Ehrenreich's attempt to produce a resolution (by arguing that the two strands are inextricably linked and ought not to be seen as a dichotomy) will not take us very far – and neither does it offer any prescription for active help to clients.

After the soberly-documented historical material, Ehrenreich indulges in the final chapter in a bit of the over-dramatization which has been a feature of too much writing in social work. The crisis in social work, occasioned by the radicalism of the 1960s has not been resolved, he claims: social work is at the crossroads. Somehow one cannot imagine a writer on social work ever saying that the profession is not at the crossroads. Well, I don't think it is. It will continue to bumble along down the same broad track shedding jargon and rhetoric to left and right as it goes, and bringing care and help and a better life to many despite itself.

John Edwards

John Edwards is lecturer in social policy at Royal Holloway and Bedford New College, London.

taste. The nursery rhyme books had wood engravings from the 18th and 19th centuries; *The Singing Game* has the black and white photographs of Father Damien Webb. Some are new works of art, and are there simply to be enjoyed; others are juxtaposed with other illustrations to show the continuity of a game over time. We are shown, for example, a photograph of children playing "The Big Ship" at Mickfield, in Yorkshire; and this is placed opposite Rubens's *Peasant Dance* and a 14th-century fresco of ladies dancing "Thread the Needle", from Siena Town Hall. This is above all a book to browse in, and to take pleasure in – and it is none the worse for that.

Jenny Cheshire

Dr Cheshire is lecturer in applied linguistics at Birkbeck College, London.

BOOKS

Kafka's Jewish identity

Kafka: Judaism, politics and literature by Ritchie Robertson. Clarendon Press: Oxford University Press, £27.50. ISBN 0 19 815830 0.

"What do I have in common with Jews? I have scarcely anything in common with myself." This statement, typical of its author, suggests that Kafka's Jewishness is as elusive and problematic as most other aspects of his work. Even though the bulk of Kafka's scholarship is still devoted to the literary texts, progress has been made in locating Kafka in his historical context and this has yielded insights into Kafka's Jewishness. In his important study, Dr Robertson synthesizes and extends this work to produce the first coherent picture of Kafka's Jewish identity.

In the Prague of the early 20th century, with its significant Jewish minority, its conflicting nationalism and its rising antisemitism, three main options presented themselves: orthodoxy, assimilation or Zionism. A revival of Jewish mysticism, especially the Hasidic tradition, further complicated the picture. Characteristically, Kafka falls between the stools, or as he may have thought, under the wheels. Orthodox faith could not be seriously entertained. Though his father still insisted on adherence to the formalities, his family was becoming rapidly secularized. As a child, Kafka found the rituals ridiculous and complained of his boredom in synagogue as comparable only to that felt years later in dancing classes. One of his criticisms of this father was that the latter had no spiritual heritage to transmit. At the same time Kafka tended to identify his Jewishness with his insecurity and inadequacy. Since these feelings were too deeply engrained to be cast off lightly, assimilation was effectively ruled out. One of Dr Robertson's best discussions deals with the satire on assimilation in the *Report to the Academy*, Kafka's story about the ape who doesn't quite succeed in becoming a man.

Dr Robertson provides a subtle account of Kafka's involvement with Zionism. He shows convincingly that despite his scepticism, and even hostility, Kafka absorbed the culturally based version of Zionism favoured at the Bar Kochba Society in Prague, which conceived of Palestine as a spiritual centre, a Jewish Vatican, rather than a political homeland. What Kafka took from it was the negative

image of westernized Jews like himself, rootless, intellectual and unable to work with their hands. This image of alienation was contrasted with the integrated communities of Eastern Jewry. Here the ghetto Jews might be at risk from their neighbours, but they supposedly lived full, harmonious lives. Even before Kafka learnt of such things he had shown his independence of mind by befriending a Yiddish actor and interesting himself in the Yiddish theatre – both despised in the general climate of assimilation. Now he learnt Hebrew and seems to have read about the Hasidim and even the Cabala. Kafka hoped to overcome his alienation by an association with ghetto Jews, whose lack of self-consciousness he admired. Needless to say, his hopes of achieving this were none too great and his ideas of emigrating to Palestine became a bookbinder or a waiter were little more than fantasies.

The documentation of Kafka's involvement with Judaism is the most successful part of the book. But Dr Robertson aims to go well beyond that and show the impact of his Jewishness on his fiction. The results here are mixed. There are some valuable insights. It is arguable that the dramatic structure of *The Metamorphosis* owes something to the family dramas of the Yiddish theatre, and that there are important Jewish themes in *The Wall* of China, Jackals and Arabs, *Josephine*

the Singer and elsewhere. But frequently the excavation of Jewish themes and motifs leads nowhere. Even if the Hebrew for "land-surveyor" involves a pun on the Messiah, it strains credulity to see the story of *K in The Castle* as a critique of Messianism. K is neither Sabbatai Zevi, nor Hitler. His case throws little or no light on either.

Likewise with *The Trial*. Here Dr Robertson opts for a religious interpretation. He draws on one of Kafka's (later) aphorisms to the effect that original sin consists in man's eternal complaint that he has been wronged; rather than face up to the demands of the moral law, he invents all sorts of excuses. This is Joseph K's situation. Here Dr Robertson follows earlier theories that K's crime is his ignorance of the law. He could only regain his innocence by acknowledging his guilt. This he fails to do and hence he is arraigned and executed by a court which embodies absolute justice.

Apart from the inevitable differences of opinion on points of detail, this approach suffers from two defects. First, any more or less linear argument dissolves the riddles which are an essential feature of Kafka's stories. Second, by supporting Kafka's institutions against his heroes, Dr Robertson appears to condone, or explain away, the sadistic or oppressive features of the stories: the sexual blackmail in *The*

Castle, the execution in *The Trial* and above all the torture machine in *The Penal Colony*. Here Kafka may himself have masochistically seen the cruelty of religious communities in a positive light. But however he judged his own story, one can have little sympathy for Dr Robertson's claim that "The infliction of pain, no doubt is inhuman, but is it necessarily inhuman? May it not, under some circumstances, be a recognition of human dignity?"

Rather than dwell on the tortuous dialectic of pain, we do better to draw attention to the benefits which Dr Robertson discerns in Kafka's preoccupation with Jewish thought and with Zionism. The first is Kafka's growing belief in human solidarity; the second – paradoxically in view of the arcane knowledge which is dredged up in this book – is that it prevented Kafka's writings from becoming wholly hermetic.

However imperfect Kafka's conquest of fear, isolation and alienation may have been, Dr Robertson has clearly shown the role of Judaism in his struggle.

Rodney Livingstone

Rodney Livingstone is senior lecturer in German at the University of Southampton.



The Jewish Town Hall in Prague. In 1912 Kafka made a short speech here introducing a Yiddish recitation evening.

Life in a supporting role

The Diaries of Sofia Tolstoy translated by Cathy Porter edited by O.A. Golnenko. Cape, £30.00. ISBN 0 224 02270 9.

Sofia Andreyevna Behrs married Count Lev Tolstoy in 1862 when she was barely 18 and lived with her turbulent genius of a husband for almost 50 years, until his death in 1910, surviving him by another nine years to die herself at the age of 75.

Few wives have given their husbands more practical support. She supervised the upbringing of their huge family, played a large part in managing the Tolstoy estates and then devoted countless hours to helping the writer with his literary work – making repeated fair copies of his near-illegible manuscripts, negotiating with publishers, reading a ceaseless stream of lengthy proofs, and even pleading in person with Tsar Alexander III to permit the publication of *The Kreutzer Sonata*, a work she often happens, the couple were not ideally matched. Beyond the disparity between them in age, intellect and earlier sexual experience – all her life the countess remained unreconciled to her husband's youthful debaucheries – Sofia suffered principally from what seemed to her

the inequality of their devotion to each other. Whereas she dedicated herself almost exclusively to husband and family, he strove to embrace the wider world – at times the whole universe – of which wife and family were only a small part. A telling picture is drawn in the countess's diary for January 8, 1891:

Overwhelmed with work all day. I went through the accounts for Yasnaya Polyana and the timber sales, and checked them. Then Nikolai Gue (the son) and I read the proofs for Volume 13 and I read the collected works. Then I gave Andreyusha and Misha a music lesson which lasted two hours, and after dinner I wrote down some chords for the children. Then I worked out our expenses on butter and eggs, and wrote yet more rough drafts of my legal petition regarding the division of the estate to the Ovsyannikov priest and the transfer of the Grinevka estate... I have seen almost nothing of Lyovochka; he spends all his time downstairs reading and writing, and comes out only to eat and sleep. He is happy and well.

Reading her diaries, we inevitably sympathize with Sofia as we follow her progress from romantic child-bride through the responsibilities and agonies of her mature years to the final decade of nursing an ill and aged husband through an exhausting routine of compresses, massages and enemas, only to be kept away from his desperate death-bed until the very last moments. We mourn with her the deaths of four children and more than one grandchild; we welcome her chaste involvement with the composer Taneiev; and we rejoice whenever she

duces an illuminating discussion of the metaphysical language of the love poetry of Quevedo in which he recognizes the carnal and despairing, as well as the philosophical, aspects of some of the greatest love sonnets in Spanish; he also makes, in passing, some interesting comments on the poetry of John Donne.

Finally, Parker examines the theme in the theatre of Calderón's most celebrated plays, including his version of the Faust legend, *El médico prodigioso*, and *La vida es sueño*. The last two concern shared guilt and diffused responsibility, and they may also be meditations on the guilt and repentance of relatives of Calderón after tragic events in his family; these plays are therefore far from being expressions of purely abstract ideas about love and human relationships.

With the gathering together of these studies we are able to see how ideas about love were expressed in different genres and how they developed in Spain over a period of two hundred years. As always, Professor Parker substantiates our enthusiasms and jolts a number of our easy assumptions.

R. M. Price

R. M. Price is senior lecturer in Spanish at the University of Manchester.

Kinds of courtly loving

The Philosophy of Love in Spanish Literature 1480-1680 by A. A. Parker edited by Terence O'Reilly. Edinburgh University Press, £10.00. ISBN 0 85224 491 6.

A. A. Parker's studies of Spanish Golden Age literature have been the source of much interest and discussion among Hispanic scholars for more than thirty years. This book is based in part on a number of lectures and essays of recent years.

After a heartening defence of the study of literature in its cultural context, Parker's first chapter makes a case for taking courtly love as a serious expression of ideal love (as against more sceptical approaches in recent years). He then considers the connection between courtly love and neoplatonism, via Leone Ebreo and Castiglione, and moves on to an examination of the importance of ideas about

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Street songs

The Singing Game by Iona and Peter Opie. Oxford University Press, £15.00. ISBN 0 19 211562 6.

In more than thirty years' work Iona and Peter Opie have moved from nursery rhymes to fairy tales, and from there to a series of books on the culture of schoolchildren. *The Singing Game* is the third in the series, and we are promised a fourth, despite the death of Peter Opie while preparing this one. The series is based on the Opies' own nationwide surveys, and the books are collections of material, rather than works of scholarship. By this I mean that the material is not analysed in any

disciplined way, and no real interpretation or explanation is offered.

There is a scholarly look to them, however. In *The Singing Game*, 133 games are collected plus some clapping chants, all of which are played by children in various parts of Britain. They are organized into 20 chapters, each with a theme – such as witch dances, friendship calls, static circles, or match-making. We are given the words of the song and sometimes its tune, and this is followed with some assorted bits of information, often given in the children's own words. There is then, in small print, an outline history with selected sources and dates of oral collections.

Despite the footnotes and the sections in small print, though, we do not learn a great deal about the history or the social function of singing games. They are, it seems, played mostly by little girls. Though popular with adults in Ancient Greece, and still played by adults in Britain in medieval times,

they were condemned as obscene during the Reformation, and it was children who kept the traditions alive. The Romantics revived them; then, in the late 19th and early 20th centuries, the philatropic intelligentsia discovered them and taught them to the industrial poor through the Board Schools. An introductory chapter gives details such as these, but for the most part tune, and this is followed with some piecemeal by the reader. Like all the Opies' books, though, *The Singing Game* is undeniably delightful. It is quaintly phrased, telling us, for instance, that the tunes given in the book should be regarded as "the wild flowers of music rather than its cultivated species", and that "childhood continues to sing in the freedom of its own 'tattered-memorial world'". The Opies' love for this world is obvious in their books, and it is possible for us to share it. The illustrations are in impeccable

BOOKS

Sitting in judgement

Verdict According to Conscience: perspectives on the English criminal trial 1700-1800
by Thomas Andrew Green
University of Chicago Press, £32.25
ISBN 0 226 30610 0

Legal history is a research area in which American scholarship excels and this present book by Thomas Green testifies to its high standards. It is an ambitious, wide-ranging and perceptive history of the English criminal trial from its origins to the eve of the Victorian reforms in criminal law. The book is essentially a collection of essays, some of which are revised versions of the author's previous publications, but unity is pro-

vided both by subject matter and connecting narrative. There is inevitably a good deal of repetition and the author's legal background is occasionally betrayed by a somewhat laboured approach and an over-indulgence in footnotes, but the book is mercifully free of jargon and is agreeable to read.

Historical interest in the jury has traditionally emphasized its role as a bulwark against tyranny from the 17th century to our own times. However, the focus of Professor Green's study is upon its much longer role as a mitigator of capital sanctions in felony trials, or what has been termed "jury nullification". This generally took the form of the exercise of jury discretion in favour of a defendant, whom the jury nevertheless believed to be technically guilty, because it believed either that the prescribed sanction was too severe or that it was inappropriate in a particular case. In its strongest form, it could also result from the jury's conviction that the act in question was not unlawful. Green's main concern is not the persistence of this practice over six centuries but rather its historical impact on the substantive law and on the

ways officials, lawyers and laymen thought about the jury and the law.

The book is divided into three parts. The first treats the origins and development of the criminal trial jury and the practice of nullification in medieval England when the jury's power to determine the defendant's fate was virtually absolute. It used this power to impose upon the courts community concepts of liability for felony in which the defendant's character and social standing were given as much weight as the act with which he had been charged in most cases and the galleys were avoided by structuring the evidence.

The second part plots the transformation of jury trial in the early modern period as its power was being reduced, and that of the bench correspondingly enhanced with the decline of the self-informing jury, the development of the prosecution and the new role of juries. Yet there was still a strong survival of the jury's earlier discretionary role in routine felony cases, and its status was boosted in the mid-17th century by the Levellers and other radicals. Out of his two famous trials came John Lilburne's assertion that juries were judges both of law and fact,

a controversial view of the jury which was passed on to the next generation. In this context, Green is surprisingly silent on the contemporary questioning of the continuing existence of the jury system in the wake of Lilburne's 1633 acquittal. After the Restoration the dominant issue became that of the non-coercion of jurors.

The final part centres on the jury trial and its critics in the 18th and early 19th centuries. As the scope of capital felony expanded in the 18th century, the jury became more active in mitigating the law than it had been since medieval times, with the bench's toleration and legitimization. Green convincingly argues that when the jury's role is taken into account the idea of a legal system managed by, and in the interests of, ruling elites is too crude. The eventual reform of the law of sanctions in the 19th century reduced the scope for jury mitigation and prepared the way for the modern view regarding the role of the jury.

Keith Lindley

Keith Lindley is senior lecturer in history at the University of Ulster at Coleraine.

Marxist paths

Writing Marxist History: British society, economy and culture since 1700
by R. S. Neale
Blackwell, £19.50
ISBN 0 631 14051 4

The casual reader might assume from its portentous sub-title that Professor Neale's new book presents a structured Marxist social history of Britain. To his credit, the author disavows any such elevated intention: "This is not the definitive Marxist history of society, economy and culture since 1700. It is a book of images". It is in reality a diverse assembly of articles and short polemics, most of which have appeared in learned journals over the past decade or so. Such unity as the book has derives from Professor Neale's interpretation of Marxism. Central to his view of modern British society is the contention that property relations "structure societies and create conditions for conflict within and between them over power, and over control and appropriation of the social product".

This contention is most stimulatingly argued in the early chapters of the book where Professor Neale can bring into play the solid research which went into his social history of Bath, published in 1981. His knowledge of southern England is considerably greater than that of the north or of Scotland and there are occasions, notably in his chapter on the bourgeoisie, where this presents problems in his analysis. Nevertheless, his argument that a commercially oriented aristocracy used its power to redefine property law in its own interest and secure conditions without which industrialization could not have developed is powerfully sustained. It is also of interest to observe how much Neale's analysis owes to the insights of that most unorthodox of Marxist historians, Harold Perkin.

Neale's "images" become cloudier as he moves into the 19th and 20th centuries. It is not simply that his empirical underpinning is far less secure. It is also that he frequently seems to discard orthodox chronology altogether. The historian uncomfortable with the defiant cry from Neale's *History and Class* (1983): "a theoretical path is the only path to historical knowledge". Thus, the second half of the book contains only one piece which uses empirical evidence to any great extent - and that a study of the New South Wales community of Hillgrove between 1870 and 1914 copy. If eccentricity, justified by the apparent need to pull "the writing of a Marxist history of British society, economy and culture out of its local context and follow 'the thousands who tried other worlds and didn't like them'".

For the rest, we are offered one of those characteristically eclectic pieces which so absorb Marxist theorists while inviting non-believers to pass hurriedly on. It is surely of limited interest to most students of modern British society to learn that Marx used the term "imperialism" twice in the

Eighteenth Brumaire of Louis Bonaparte and that the sage's ephemeral journalism was nevertheless "consistent with the principal general and theoretical arguments of the materialist conception of history". Neale's conclusion is presented with splendid and, I presume, unconscious irony: "it should not come as a surprise to a Marxist historian to find that Marx on 'imperialism' was not a 'Marxist' - a fact which, for a Marxist, should be no cause for embarrassment".

Greater cause for embarrassment is surely found in Neale's final chapter, a maladroitness piece of autobiographical reminiscence (deliberate grammatical solecisms and all) which charts the tyro Marxist's progress from Western Road local junior school via the scholarship examination to active commando service in Hong Kong where - surprise, surprise - he discovered that the "lure of upward social mobility for gullible working-class grammar school boys was a fraud... I was not even middle-class material".

As will already be evident, this book will set many readers' teeth firmly on edge. The pity is that its format and style, by turns folksy and arid, will deter many from persevering to discover the genuine value of some of his insights. His attack on Lindert and Williamson's optimistic conclusions in this standard of living debate, for example, is first class. Before his peroration is diverted into a cul-de-sac where lurks Marx and his ready packaged theories of alienation. Neale's book is opinionated, frequently ungenerous to alternative interpretations and very definitely not for

those who object to having their historical notes abrasively rubbed in Marxist theory. As those who persevere with his idiosyncrasies will discover also, he has little time even for fellow Marxists who do not follow his own reading of the runes. Eric Hobsbawm and Edward Thompson are dubbed for entering the standard of living debate "with only a weak or soft version of the materialist conception of history behind them". Raymond Williams's cultural materialism is attacked for emphasizing language "in a classless sort of way". Such hector has "the capacity to domesticate the materialist conception of history".

Professor Neale is nothing if not feral and his own Marxism is territorially predatory. Only the pole-cast school of Marxism (semi-house-trained in this case, no doubt, by the tenure of an economic history chair in one of the old white colonies) would fling Deleuze's Moll Flanders at us as the dialectical image "of the heroic age of primitive accumulation in England" while letting Jane Austen's *Mansfield Park* symbolize "the agrarian capitalist mode of production already corrupted by its connections with the urban/mercantile mode of production and its attendant monied interest". Fanny Price's obnoxiousness is naturally that of "an alienated victim of property". It is indeed remarkable to what conclusions the author's "only path to historical knowledge" can lead.

Eric J. Evans

Eric J. Evans is professor of social history at the University of Lancaster.

London's factious fractures

A Fractured Society: the politics of London in the first age of Party 1688-1715
by Gary Stuart De Krey
Oxford University Press, £25.00
ISBN 0 19 820067 6

English society in the early modern period embraced an immense paradox: culturally, technologically and commercially rudimentary, its backward countryside running on archaic political conventions, it contained at its centre Europe's chief metropolis - the most populous, the most dynamic in politics, trade, finance, ideas, religion. London was almost England's only claim to rank as a significant state in European terms: as the pacemaker at its heart, the metropolis kept the body politic from the dismal track records of societies like Wales and Scotland. How did this microcosm work? What were its internal dynamics?

The truth is that we hardly know. London is so often taken as synonymous with England that only a handful of pioneering historians (this book pays due tribute to Valerie Pearl) have written the history of the capital as such. Local studies have meant provincial studies: the most obvious example, *London* itself, is still often over-

looked. Dr De Krey therefore reaps the rich harvest of a pioneer, and does so with American doctoral thoroughness. Anyone who thinks Namerism is dead should ponder the results of this analysis of more than a thousand London merchants: Common Councilmen, aldermen, mayors and City MPs are the raw material for a profoundly researched study which fuses political manoeuvre, psephology, economics and quantifying accounts of religious allegiance in the most fashionable modern manner.

The Glorious Revolution set up shock waves which reverberated for decades through the City. What caused its fractures? Conflict after 1688 was a reassertion of the Whig v Tory schism of the Exclusion Crisis: the two great parties continued to receive almost equal popular backing in the City, as Common Council elections show. In constitutional terms, everyone had dirty hands. Successive monarchs intervened to tug City politics and administration: there was nothing special in this respect about James II. Populist-libertarian and paternalistic, hierarchical and anti-state, he was exchanged as Whig politics alternated in power. Equally, disputes over commercial policy under wartime strains, though real, involved mainly the elite of the merchant community.

Rather, "Pride of place must be accorded to religion, the most enduring and visible cause of contention in London". The Whigs, the party of wealth from the 1680s, were already the party of Dissent by 1679. They were denounced by a high church Tory critique which, as Dr De Krey shows, received widespread popular endorsement, setting the scene for popu-



A picture from an 1868 edition of *Servant's Magazine*, taken from Adeline Hartcup's book *Below Stairs in the Great Country Houses* (Sidgwick & Jackson, £6.95).

lar disaffection under the Hanoverians. By 1714, the Whigs (in recognizable Walpolian fashion) had adopted "an oligarchic philosophy of social control". Tories were the heirs to "an abandoned libertarian legacy". I am less convinced, however, that De Krey has proved that "libertarian" equals "popular" and that it was the Whigs' disengagement from the most extreme stages of 1688-89 which lost them massive popular support. Dissent figures very largely in this book, but there is much less attention to the positive reasons for proletarian Tory allegiance.

The author is at his best when quantifying; the narrative passages suffer more from a PhD being squeezed into a pint pot. Nor am I happy with the use of unexamined categories like "bourgeois", "commercial", "the capitalist mentality" which meant the replacement of a paternalistic, hierarchical society by "a commercial civilization", and so on. Old assumptions which are drilled into all nicely educated Americans. Dr De Krey is clever enough to divest himself of them, however, and his achievement is already impressive. No amount of reprinting Mrs Dorothy George can disguise a huge gap in our understanding of English society: the history of Namer, let alone its Lawrence Stone or Roland Mousnier. On the basis of this splendid first book, Dr De Krey may well go on to seize such a role.

J. C. D. Clark

Dr Clark is a member of the History Faculty at the University of Cambridge.

Costs of conquest

Tudor Ireland: crown, community and the conflict of cultures 1470-1603
by Steven G. Ellis
Longman, £8.95
ISBN 0 582 49341 2

In this well written, closely argued and compellingly readable book Steven Ellis sets out to answer the question why the relationship between the English crown and the lordship of Ireland was transformed, very much for the worse, in the Tudor period. He does not start with the assumption that the gulf between English and Irish interests was unbridgeable. Even in religion there was a great deal of common ground. In Ireland as in England the Henrician supremacy was accepted without much trouble, and the same applied to the dissolution of the monasteries; as Ellis comments "There is little sign that the passing of the religious was much regretted, and any feelings of remorse were soon assuaged by the generous grants of church lands which landowners, merchants and officials received for their cooperation".

In England the key to successful royal government was harmony between the ruler and the property owners. The same was true of Ireland, and the crown could count on the support of the Old English magnates, the descendants of the Anglo-Norman settlers who had first carried an English presence into Ireland. But what about the Gaelic chieftains whose territories lay outside the Pale and who were the *de facto* rulers of more than half the island? Subduing them by force would require a large army and expenditure on a scale that Tudor monarchs were reluctant to contemplate. An alternative and much cheaper solution was that of turning them into English-style aristocrats. This was the policy adopted by Sir Anthony St. Leger who was appointed Deputy in 1540 and persuaded the chieftains to surrender their land and receive it back as a royal fief. In return for acknowledging the sovereignty of the King of England, who was now proclaimed King of Ireland as well, they were granted titles of nobility. The head of the O'Neill clan became Earl of Tyrone, Murrough O'Brien Earl of Thomond, and Olick Burke Earl of Clanrickard.

This policy of peaceful absorption acquired well for Anglo-Irish relations, but it did not outlive Henry VIII. The men who ruled in the name of Edward VI, and subsequently of Elizabeth, were aggressive protestants, over-weeningly confident of the righteousness of their cause and determined to press ahead at full speed. Not only did they adopt forceful measures; they lumped the Irish and the Old English together as equally unregenerate and relied on men of their own stamp to carry out their policy. This was the role of John Bull's other island. These New English had an arrogant disregard for Irish traditions and nothing but contempt for Irish civilization. They carried the English Bible in one hand and the sword in the other, and they committed themselves simultaneously to evangelism and self-enrichment. Elizabeth found them distasteful, but she could not turn back to indirect rule through the Old English, as her grandfather had done so successfully.

The ill will generated in the twenty years after Henry VIII's death had alienated the crown from both the Old English and the Gaelic Irish. Moreover, the intolerant protestant nationalism of the New English stimulated the growth of a sense of Irishness which identified itself with defence of the old order in church and state. Conservative and Catholic hopes now focused on Philip II of Spain, but the effect of this was to leave Elizabeth at the mercy of the New English and their supporters at court. It was they who dragged her into a policy of conquest that cost her more than two million pounds and, in the cause of strengthening the monarchy in Ireland, seriously weakened it in England. The problems created by this policy are with us still, and Ellis's book, as well as being a major work in its own right, is a sombre reminder of the relevance of history to contemporary Britain.

Roger Lockyer

Roger Lockyer is reader in history at Royal Holloway College, London.

BOOKS

PSYCHOLOGY

Freudian myths

Decline and Fall of the Freudian Empire
by Hans Eysenck
Viking, £12.95
ISBN 0 670 80130 5

Professor Hans Eysenck and Dr Sigmund Freud have certain things in common: they are cultured, polemical and dedicated to their subjects; they are clear and persuasive writers; and they can both display arrogance, although Eysenck cannot compete with Freud's grotesquely inflated ego. If only Freud were alive today, what a splendid spectacle the two would have made together on television. I wonder who would have won a debate on psychoanalysis. My money would have been on Eysenck, for his tenacity and sharpness would surely have been more than a match for Freud's capacity to hide beneath a cloud of evasions.

In *Decline and Fall of the Freudian Empire*, the issue is never in doubt; indeed, the book is more of a wholesale massacre than a victory, since it crushes every aspect of psychoanalysis including even the originality of some of the basic ideas. Eysenck makes good use of the recent spate of scholarly books and articles that have revised the history of the subject and have critically analysed its ideas and uses; he also produces some ingenious arguments of his own. Here are some of his points.

The idea of the unconscious was much in vogue in Freud's day; indeed, a thousand-page book on it was written in 1896 by E. von Hartmann, whom characteristically Freud does not acknowledge. A re-examination of Freud's own cases shows that his claims for success were monstrously untrue: Anna O (who was in any case suffering a physical illness that Freud failed to diagnose) and the Wolf Man were ill for the rest of their lives. Moreover, studies of Dora's case and that of Little Hans show that they were brow-beaten into accepting a psychoanalytic interpretation of their problems and into falsifying their own

feelings to conform with psychoanalytic dicta.

A recent attempt to put together the massive literature on the efficacy of psychotherapy shows, according to its authors, that treatment of a psychoanalytic kind is efficacious (though less so than some other forms of therapy), but Eysenck destroys this conclusion by pointing out that according to the study in question, the success of psychoanalysis is no higher than that of simple placebo treatments. Moreover, neither the length of training of the therapist nor the length of therapy have any effect at all: so much for the gruelling and prolonged training of psychoanalysts and their insistence that it takes many years to treat a patient.

On the whole, experimental tests of Freudian theory fail to support it, and when they do there are more plausible explanations of the results. Thus, the finding that children who spend short times at the breast tend to suck their thumbs is evidence for an oral drive; it may simply mean that these children have a strong drive to suck, and hence need to spend little time at the breast because they feed themselves quickly: their strong sucking drive also makes them suck their fingers. Many other observations have failed to confirm the existence of oral and anal stages in child development.



Sigmund Freud taking his first flight in 1926 at the age of 70.

Congenial terms

Behaviourism: a conceptual reconstruction
by G. E. Zuriff
Columbia University Press, \$45.50
ISBN 0 231 05912 4

It will seem to many quite extraordinary that this book should be produced in 1985. Behaviourism has had about 70 years of history since J. B. Watson inaugurated the movement, but it has now surely had its day.

Professor Zuriff's aim, as indicated by his subtitle, is to abstract from the plethora of behaviourist writings over the period of the movement's history a framework which will enable readers to understand and assess behaviourist attitudes to a wide range of psychological issues. For this purpose, the historical order of the writings is free to be inverted as a basis for his "reconstruction" contributions to be behaviourism from a wide temporal perspective. The premises on which the consequent assessment relies are that psychology is a natural science and that all that matters for this purpose is the prediction and control of behaviour.

Zuriff's presentation of behaviourism is not uncritical. Indeed, he purports to be putting forward a dialogue on a number of issues, with himself as referee. The result, however, is that too often we are told that on these issues a behaviourist might, given the premises noted above, interpret what is at stake in terms congenial to him. Thus, for example, first-person reports, when not ignored on the grounds that they have no implications for the prediction and control of behaviour, might be construed as ver-

bal discriminative responses to stimuli. But the question, surely, is not whether this might be done, but whether it might *plausibly* be done in a way that facilitates understanding of what is at issue. For the aim of a scientific theory is not just prediction and control; it is understanding too.

Much of Zuriff's discussion goes over ground that was well dug in the 1940s and 1950s - the desirability of operational definitions of terms, the distinction between intervening variables and hypothetical constructs, and so on. It is surprising to find these issues systematically gone through yet again. On one crucial issue, however, Zuriff has comparatively little to say - what is behaviour? He does recognize that there is a question to be answered here, and discusses it in chapter three under the heading of "the behavioural data language", concluding that "descriptions that are inferential, intentional, purposive, molar [sic], or in action language are suspect". What is acceptable is what is a matter of intersubjective agreement and of "tradeoffs between intersubjective agreement and other desirable qualities". In the end, it depends on what is referred to as "scientific judgement".

This is not good enough. Zuriff wants to resist the identification of behaviour with muscular and other movements which may lead to the reduction of psychology to physiology. He also wants to have nothing to do with concepts such as those of action and intention. What lies between?

It is perhaps symptomatic here that Zuriff makes great use of the 'increasingly common Americanism' "behavior" (in the plural). When I was editor of *Mind*, I once objected to a contributor who used that expression that it involved a misunderstanding of the grammar of the word. I was told that it involved, rather, a conceptual change. If that is true, it is a change for the worse; for it obscures the distinction between forms of behaviour and individual actions and movements.

Eysenck also attacks psychobiology - the use of psychoanalysis to interpret historical or biographical events.

Freud's own interpretation of Leonardo da Vinci's life hinges on Leonardo's recalling that he had been struck in the mouth by a vulture's tail when young; clearly an indication of a wish for homosexual fellatio. Freud built a huge edifice of speculation on the associations of vultures, but a more accurate translation of Leonardo's memoir reveals that the bird was a kite. Geoffrey Gorer attributed the savagery of the Japanese during the training of their bowel to the fact that Japanese bowel training was no more severe than that of Caucasians. This crazy logic runs through much of the psychoanalytic literature: by inventing a false but plausible explanation for behaviour, it is possible both to explain the behaviour and then by assuming the imaginary cause to be the real one to prove the truth of psychoanalytic hypotheses.

Finally, Eysenck exposes repeatedly the contradictions and slipshodness of Freud's own arguments. For example, Freud wrote: "None but physicians who practise psychoanalysis can have... any possibility of forming a judgement that is uninfluenced by their own dislikes and prejudices". The idea that psychoanalysts are unprejudiced is a nice conceit, but the arrogance is none the less disgusting.

The book's only fault is that Eysenck places a little too much emphasis on science and tends to overvalue the "laws" established by experimental psychology. In fact, scientific psychology has little more to tell us about human personality and emotions than does psychoanalysis - although that may be no bad thing, since it is better to admit ignorance than to foster falsehood. The real problem about psychoanalysis is that it fails to meet the canons of reasoning that should and normally do prevail even in non-scientific disciplines.

Nevertheless, this is a very good book - well argued, well documented, and well written. It should be read by everyone who is not already disillusioned about psychoanalysis, and in particular by literary magpies who think a smattering of psychoanalysis will help them to understand poetry, by anyone thinking of either having or giving an analysis, and by social workers everywhere.

Stuart Sutherland

Stuart Sutherland is professor of experimental psychology at the University of Sussex.

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BOOKS

PSYCHOLOGY

Sensory capacities

Animal Intelligence
edited by J. Weiskrantz
Clarendon Press: Oxford University Press, £32.50
ISBN 0 19 852124 3

It is characteristic of normal adult intelligence to think in terms of quantities which behave in ways that are crudely predictable from simple arithmetic: if we neither gain nor lose weight, then our weight must be unchanged. Very young children do not think like this: they tend to assume that orange juice poured into a tall thin glass somehow expands in volume; and that beads pushed closer together become fewer in number.

This aspect of human psychology is worth considering in the context of animal intelligence for two reasons. First, we may be able to ask technical questions about conceptualizations of space and mass available to species other than ourselves. But more fun-

damentally, we should be extremely suspicious about the human reflex of addressing complicated questions of ability in terms of simple quantities. As Professor Weiskrantz points out in the opening sentence of this report of a Royal Society discussion meeting, since the assessment of human intelligence along a single dimension (of IQ points) has proved so problematical, any reference to animal intelligence must immediately raise doubts as to the existence of an entity to which the term could usefully apply.

In fact, the title is rather misleading. Although many of the contributors are concerned with detailed analyses of certain kinds of information processing capacity tested in one or two species of laboratory mammals, the hope of the organizers of the meeting was that "converging strands" of experimental work might interact. The two chapters which most directly raise the general issue of animal intelligence are those by H. J. Jerison and E. M. Macphail. Jerison gives a succinct account of his anatomical survey of brain size, which within vertebrate classes is correlated with the two-thirds power of body weight, but suggests that any other systematic difference in "encephalization" (as between reptiles and mammals) should be seen as allowing for different intelligences in the plural. Macphail, taking what at first sight seems a very different tack, puts forward a null hypothesis for vertebrate intelligence, arguing that no species differs from any other in intellectual capacity (except for *Homo*

sapiens). This view emphasizes quite rightly that differences in sensory capacity may account for species differences in behaviour. But not every one agrees that all species differences can be explained at such peripheral levels. N. J. Mackintosh and his collaborators, after reporting a series of empirical comparisons between pigeons and rhesus (and other corvids) conclude that the rhesus are superior at applying a previously learned rule to new stimuli.

Many other contributors refer in some way or other to differences between higher and lower cognitive processes in animals. Weiskrantz's own dysfunction is between "reflexive" and "reflective" processes. A. Dickinson has developed experimental procedures for distinguishing between habits (Pavlovian knee-jerk associations) and actions (which are in some sense directed by anticipated consequences, even in rats). David Gaffan also examines the difference between habits and voluntary movements, suggesting that the latter are often controlled by memories of previous moments, and reporting that memory for previous actions seems to be impaired, but other psychological functions spared, by lesions to the hippocampus in the temporal lobes of the rhesus monkeys. R. E. Passingham believes that the highly developed brains of monkeys allow them to bring together bits of information encountered at different times or in different places but do not make them any better than rats at the simpler associations sufficient to ensure a return to the usual location of food.

Memory might certainly be put down as an aspect of animal intelligence, and one that is currently much studied. D. D. Olton briefly reviews material suggesting that considerable powers of memory are required for the foraging strategies observed in nature. A different function is that of categorization. Weiskrantz presents results showing monkeys correctly recognizing objects seen in novel orientations, which is obviously a useful ability to possess outside the laboratory, whereas R. J. Herrnstein gives a comprehensive account of his finding that pigeons, when required to respond to a certain category of coloured slide to obtain food, can do this either by "photographic retention" or by a more abstract process which apparently enables them to decide, for instance, whether or not a completely novel slide taken by a scuba diver contains a fish - a task for which they should be ill-fitted by either phylogeny or ontogeny.



Before the sale of narcotics was regulated by the Food and Drug Administration, substances like alcohol, cocaine and heroin were dispensed freely in over-the-counter patent medicines. This 1885 advertisement for one of them is illustrated in Diane E. Papalia and Sally Wendkos Old's introductory textbook *Psychology* (McGraw-Hill, £26.25).

Herrnstein, with Macphail, suspects that the chimpanzee may have little by way of intellectual advantage over the pigeon, but they are clearly in the minority. Nine of the 15 chapters here are mainly concerned with primates and B. T. and R. A. Gardner, Sue Savage-Rumbaugh and D. M. Rumbaugh, and H. S. Terrace provide a sizeable fraction of all those who have been attempting to teach domestic chimpanzees a language-like system of communication. The extent to which these attempts should be regarded as failures is still unclear, and it is a pity that nothing is included of the recent work from David Premack's laboratory, which has shifted towards reasoning tasks and quantitative judgements, where the chimpanzee's talents are more obvious. The final two chapters support the now widely held view that primates have intellectual superiorities of some degree, as a consequence of their complicated social life. D. L. Cheney and R. M. Seyfarth have for several years been playing tape-recorded sounds to troops of wild vervet monkeys, which pay close attention to alarm calls of various kinds, and show interest and concern when the call of an individual belonging to one adjacent group is played back from the territory of another. Regrettably, negative results were obtained when hippo grunts were played from speakers hidden in trees instead of on the ground, since the monkeys ignored all hippo sounds, and indeed seem indifferent

to other species unless they are either predators or give immediate warning of predators. H. Kummer and Jane Goodall augment the idea of social complexity (which does not stand up especially well to comparisons between solitary and social species) with the hypothesis that free-time and energy (including freedom from social pressures) may be conducive to innovation in primate behaviour (as seems to be the case in zoos) and the observation that social interactions have a role in imitation, and the passing on of local traditions.

This completes an admirably broad coverage, and the book is a fairly comprehensive collection of contemporary views on cognitive processes in animals. It is too specialized, and too expensive, to be widely used in undergraduate teaching. The multiplicity of differing opinions expressed is slightly discouraging, indeed, there is little evidence that converging strands of research are about to be woven into a cloth sufficient to cover what is still an embarrassing expanse of theoretical nakedness. But at least a local tradition has begun that there is more to animal intelligence than reflexes.

Stephen Walker

Stephen Walker is lecturer in psychology at Birkbeck College, London. A paperback edition of his book *Animal Thought* has recently been published by Routledge & Kegan Paul.

Aggressive stances

Accounting for Aggression:
perspectives on aggression and violence
by Gerda Siann
Allen & Unwin, £20.00 and £6.95
ISBN 0 04 301187 X and 301188 8

Gerda Siann has a background in teaching in higher education, rather than in specialist research on aggression. Her book seems all the better for it: it is broad in scope, well presented, and free from excessive dogmatism. Inevitably, however, there is some over-simplification: you cannot hope to deal in depth with the vast number of theoretical positions, coming from several disciplines, in a mere 270 pages. The task of defining aggression itself could occupy half the book. Indeed, at the last count there were something like 300 different definitions in the psychological and biological textbooks, many of them incompatible. Despite the sometimes quite brutal condensation, however, Siann's book serves well as a broad and readable introduction to a field characterized by deeply entrenched ideological positions.

After an initial discussion of problems of definition, the early chapters outline the various biological and ethological perspectives. One slight surprise here is the repeated reference to Robert Ardrey, a Hollywood script-writer turned amateur scientist who wrote many popular, though quite misleading, books on aggression and territoriality. To include him in a serious discussion of the origins of aggression is a bit like quoting Woody Allen in a treatise on psychoanalysis. Elsewhere, Siann challenges the quite simple observation by the anthropologist Robin Fox that people

are fascinated and aroused by violence. Although Fox embellishes his point in his own characteristically crass manner, it is surely sound. Indeed, violence has replaced sex as the new focus of the imagination: the new pornography features *Rambo*, not surreptitious sensuality. Although Siann is right to challenge some of Fox's other ideas about man's hunting ancestry and the evolutionary line on aggression, her diatribe is such that the real points are lost in a sea of invective.

A further chapter, on psychoanalytic approaches, rightly points out the shallowness of Sigmund Freud's concept of the death instinct, the views of Anthony Storr and Eric Fromm are discussed briefly, with Fromm getting the more favourable review. Siann criticizes the psychodynamic approach on the basis of its assumptions about the innateness of aggression, but acknowledges its alleged value in deepening our understanding of some aggressive feelings.

The section on laboratory-based experimental studies of aggression is far too charitable. For years psychologists, largely American, have been showing children ostensibly aggressive films and then counting how many times they hit Bobo dolls which are inexplicably left bobbing around. They claim that witnessing aggression (even in a film) increases aggression because the children hit the dolls more often than those who have not seen the aggressive film. They may be right. But the bizarre nature of many of the experiments is such that very few real-world cases of aggression can be found in recent textbooks, and Siann's chapter will add little to the debate.

The penultimate chapter, on sociological and psychological pers-

pectives, examines the criminological studies of such researchers as West and Farrington and discusses the sociological work by, among others, Wolfgang and Ferracuti. Phenomenological approaches are also considered, and a largely pertinent assessment of their limitations provided.

Finally, we come to the really ambitious task - that of attempting a synthesis of the separate perspectives. Siann achieves little, however, in the way of true synthesis, nor does she identify the various levels of explanation that the different perspectives provide. These are summarized somewhat cursorily and we are suddenly introduced to Carl Rogers and self-theory, an odd choice as a basis for integrating the divergent strands of theorizing about aggression. Here, however, Siann reveals her true colours, pleading that we can put an end to violence by having more empathy with each other. She presents a romantic vision of "the promotion of altruistic or pro-social behaviour" as an antidote to belligerence and follows this with some equally naive stuff about people in high positions fostering aggressive stances. This final chapter offers little in the way of academic discussion and nothing in the way of true synthesis.

As an introductory text for students in a wide range of social disciplines, however, this eclectic book will be very useful.

Peter Marsh

Peter Marsh is director of the psychology unit, department of social studies, Oxford Polytechnic.

A special issue of the *British Journal of Developmental Psychology*, guest edited by George E. Butterworth and Paul L. Harris, has been published as *Infancy* by the British Psychological Society at £6.95.

BOOKS

PSYCHOLOGY

Innate ability

Language Learnability and
Language Development
by Steven Pinker
Harvard University Press, £24.95
ISBN 0 674 51054 2

That languages are learnable is constantly confirmed by the ease with which human infants acquire the linguistic system of the community into which they are born. But how does the infant extract from the speech directed to him the grammar of the language to which he is exposed? And what are the cognitive mechanisms that guarantee successful acquisition for all children, apart from a small percentage of impaired individuals?

Such questions provoked psychologists like Roger Brown to investigate in detail the language development of American children during the 1960s. The impetus then came from Noam Chomsky, who argued that a successful linguistic theory would account not only for grammars of individual lan-

guages, but also for the child's successful and speedy construction of those grammars. His hypothesis was that the abstract formal principles according to which grammars were constructed, constituted also an innate endowment with which the child approached the language learning task.

The work of Brown and others did indicate the importance of rule-learning in acquisition, particularly for inflections and some syntactic phenomena such as auxiliary inversion in English. The indirect support for principles significant in Chomskian theory, such as transformations, was not enough, however, to prevent the gradual drifting apart of linguistic theory and language acquisition research. The estrangement was never total. But as linguistic theory changed rapidly in the early 1970s, and as the perspective of empirical research broadened considerably, a series of merely casual encounters ensued. This state of affairs lasted until recently, when a new perspective, "learnability", offered the prospect of a reunion.

Pinker's book, as the most explicit and detailed account of the interaction between the principles of learnability and data from language acquisition research, is proof of the renewed vitality of the relationship. It is also a work which researchers in language acquisition will need to take seriously, even if they disagree with its premises. "Learnability" here refers to the way in which the child's success in acquiring the language imposes a constraint on the nature of the theory that is put forward to account for it. The end-point of learning is the adult

grammar. This is only learnable (it is asserted) under certain assumptions about the nature of the input data to which the child is exposed, and about the mechanisms which are available for the language-learning task. Like other learnability theorists, Pinker assumes that the only data provided for the child are primary data in the form of sentences in the language to be learned, uttered in the context of events and objects in his environment. The learner is not privy to "negative evidence" - corrections from parents, for example, or more direct indications about the grammatical status of his own early attempts at the language. Like others, Pinker suggests that the child is innately equipped with a mechanism that allows him to learn a generative grammar. That innate mechanism allows the child to construct, from the primary data, the appropriate grammatical framework: its phrase-structure rules, its lexical entries, its complement structures and control relations.

Other writers on learnability have generally been content at this point to develop purely formal accounts of a learning procedure which would acquire an adult grammar of the specified kind if their assumptions hold. Pinker goes much further. The contribution of his book lies not just in its carefully argued section on learnability theory and acquisition, but in its detailed analysis of the empirical consequences of his assumptions, both in terms of a number of areas of the grammar and an impressive array of data on the learning of English. Although there is much with which I would like to take issue - the basic learnability assumptions, the idea that learning mechanisms remain unchanged throughout the acquisition period, particular interpretations of data, and the computational metaphor implicit in the whole approach - Pinker's carefully reasoned book promises to be an influential work, which sets high standards for its potential critics.

Paul Fletcher

Paul Fletcher is lecturer in linguistic science at the University of Reading.

Old chestnuts

Human Intelligence: perspectives
and prospects
by Robert Kail and James W. Pellegrino
Freeman, £22.95 and £14.95
ISBN 0 7167 1688 X and 1689 5

Robert Kail and James W. Pellegrino, two American experimental psychologists, attempt to examine three approaches to the study of human intelligence in such a way that renders with a limited background in psychology can readily gain some appreciation of the distinctive features exhibited by those approaches.

They begin, obviously enough, with a consideration of the psychometric approach, stemming from the measurements of the Victorian genius Francis Galton at University College London and the pioneering tests of James McKeen Cattell at Columbia University in New York. As both Galton and Cattell believed that simple sensory, perceptual and motor processes constituted the fundamental elements of thought, they sought to equate intelligence with, for example, the speed of response to a tone. The failure to find usefully high correlations between these indices and college achievement scores, however, contributed to the decline of interest in sensory intelligence and its supercession by an emphasis on higher thought processes - verbal and spatial reasoning, memory, and so on. Alfred Binet developed a test to evaluate those processes and so originated a line of work traceable via the efforts of Charles Spearman and Louis Thurstone to the present day.

It is more appropriate, therefore, to speak of two psychometric traditions. Indeed, there has recently been a renewal of interest in the simpler processes. For instance, H. J. Eysenck and D. E. and A. E. Hendrickson are currently refining psychophysiological measures of intelligence and Christy Brand has reported respectably high negative correlations between a judgement task and IQ scores. Kail and Pellegrino, however, do not see fit to discuss these endeavours, moving on to a consideration of the information-processing approach to intelligence. Using the analogy of a computer system, they aim to characterize the processes between input and output and between question and answer, underlining the importance of the knowledge base which allows us to learn and sometimes to profit from experience. They also readily accept the distinction between "declarative" knowledge (know what) and "procedural" knowledge (know how).

The authors sketch out pattern recognition mechanisms, but do not draw a proper distinction between information and knowledge. They explore a

merger between the psychometric approach, with its ability measures, and information processing, with its process analysis. And they summarize R. J. Sternberg's computational theory of intelligence, highlighting the somewhat unexpected finding that skilled reasoners are slow at encoding information. They later criticize their proposed merger, however, for using only the young adult as its static data source and ignoring the dynamics of intellectual change arising throughout the lifespan.

The developmental approach, associated especially with the theories of Jean Piaget, fully accepts that an understanding of the evolution of intelligence is a crucial part of any adequate explanation of individual differences. However, although Kail and Pellegrino deal with Piaget's theory, they present only an inadequate précis of what is a unique view of the ways in which knowledge is acquired: namely, genetic epistemology. They do not tell us, for example, that Piaget himself revised his views about the stage of "formal operational thought".

The book draws to a close with an ingenious epitome of Sternberg's ingenious triarchic theory of human intelligence, and a synopsis of Howard Gardner's theory of multiple intelligences. Both these theories suffer from the unconstrained arbitrary constructions of their proponents, Gardner's the more so: although he sets up "signs" for identifying a category of intelligence, it remains obscure as to whether these criteria are sufficient or merely necessary or just capricious. Kail and Pellegrino enthusiastically recount his bizarre but appealing notion that song (musical intelligence) and dance (bodily-kinesthetic intelligence) should be the main concerns of researchers.

The book ends with an epilogue of new perspectives on old issues. Group differences in intelligence are at last mentioned; and psychometricians are lambasted for supporting the rigid dogma of "immutable heritability". Nevertheless, even the now controversial review of twin studies by L. Erlenmeyer-Kimling and L. F. Jarvik (1963) emphasized that environment is not "without effect upon intellectual functioning" and that "the intellectual level is not unalterably fixed by the genetic constitution". Thus, the dogma was never as inflexible as Kail and Pellegrino imply.

This is a competent enough book which does not entirely accomplish its goal of introducing the reader to the psychology of human intelligence.

R. E. Rawles

R. E. Rawles is lecturer in psychology at University College London.

A collection of essays on *Language and Learning: an Interactional perspective* has been edited by Gordon Wells and John Nicholls and published by Falmer Press at £6.95.

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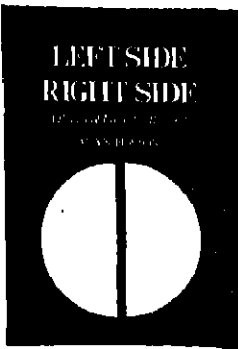
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BOOKS

PSYCHOLOGY

Reading skills

Children's Reading Problems:
psychology and education
by Peter Bryant and Lynette Bradley
Blackwell, £16.50 and £5.95
ISBN 0 631 13682 7 and 13683 5
Reading Ability
by Charles A. Perfetti
Oxford University Press, £25.00
ISBN 0 19 503501 1

In a brief note to *Nature* in 1983, Bryant and Bradley reported the results of a long-term longitudinal study of young readers. The most important of their findings was that training six-year-old children in two tasks (teaching about rhyme and alliteration, and about how individual sounds could be represented by individual plastic letters) caused them to be better readers when they were eight years old than a comparable group of children who had not been exposed to the two training regimes. Although others have claimed similar findings, no previous study has been so rigorously designed or as extensive. As the training methods are described in detail in the last two chapters of their book, this should make it of immense interest to parents and teachers.

The book is also intended to be of interest to investigators of learning to read and of developmental dyslexia, since the authors offer views as to how children learn to read and how backwardness in reading comes about. They claim that learning to read is learning to use letter-sound correspondences - that is why difficulty in appreciating the individual sounds which go to make up words causes backwardness in reading. But their claim conflicts with evidence of two sorts. First, at the very earliest stages of reading, children identify words not by applying letter-sound rules but by noticing idiosyncratic visual features - so they might read any word containing 'll' as yellow. Second, there is the fact that at some late stage of learning to read, reliance on letter-sound rules must be abandoned, because skilled readers can read words which disobey these rules (irregular words such as *yacht*) and can also distinguish words which would be indistinguishable when read by letter-sound rules (homophones such as *saïf/sale*). No matter how expert a child is at appreciating the structure of spoken words, skilled reading will not be attained until words are treated in terms of their orthography, rather than being read by rule.

If all that were important were phonological awareness, then training in phonological awareness alone should have significantly assisted learning to read. In their longitudinal study, however, Bryant and Bradley did not find this: training with seen letters was also needed; and the authors acknowledge that, when asked why the method worked so well, they "can only speculate" and (later) are "only speculating". A more determined effort at theorizing about the various processes at work over the course of learning to read might have yielded non-speculative answers to this basic question.

The authors' theorizing about the causes of reading backwardness is also disappointing: children, they claim, are located at various points along a continuum of the ability to analyse words into sounds, the children at the low end of this continuum being the ones who will be especially backward in reading. But this view implies that there is only one cause of reading backwardness and only one variety of

reading backwardness. Both implications are difficult to reconcile with current work on developmental dyslexia.

For example, the authors consider and dismiss the idea that reading backwardness is sometimes due to "visual deficits". The evidence they cite and reject here certainly should be rejected, because the kinds of visual processing studied in the work they discuss are quite unlike the kinds of visual processing that are required for reading. But others, such as Lovegrove, who have studied the ability of backward readers to perform visual-processing tasks of the kind involved in the early stages of letter and word recognition, have found that a sizeable proportion of the children do have defective visual processing which would make reading difficult. As not all backward readers show this deficit, they must have reading difficulties for other reasons - perhaps because they are poor at breaking spoken words up into constituent sounds.

Bryant and Bradley do acknowledge once or twice that learning to read must depend on a variety of skills, not just phonological awareness. But such acknowledgements are not taken seriously: if they were, the authors would have to acknowledge that there would be varieties of backwardness in reading, differing from each other in terms of which component skill the child was poor at; but the authors argue that there is no evidence for such varieties.

A major line of argument here is that "no one has yet shown that backward readers fall into types which are not also found among other children". I could not understand this argument, for two reasons. First, those who do believe that sub-types of backward reading exist do not deny (why would they?) that younger normal readers may read in ways similar to the ways that older backward readers read. Second, Bryant and Bradley themselves make no effort to show that the children they classify as backward readers read in ways unlike those characteristic of young normal readers.

Perfetti's book, somewhat broader in scope, deals with adult skilled reading as well as learning to read and reading backwardness. It contains a number of useful review chapters, particularly the survey of work on comprehension in skilled reading (chapter three) and the material on beginning reading (chapter ten). Though not very original, these chapters are good; other chapters, though original, do not seem to be as good. Chapter five introduces "verbal efficiency theory" as a way of explaining

Good grammar

A Child's Learning of English
by Paul Fletcher
Blackwell, £22.50 and £7.95
ISBN 0 631 14281 9 and 14282 7

Studies in language development can be roughly divided into two main types: longitudinal and cross-sectional. Longitudinal studies collect data on a small number of children over an extended period of time. Typically, the whole language system is under investigation. In contrast, cross-sectional studies collect data on large numbers of children of different ages on one occasion. Usually, some specific and often quite narrow linguistic ability is under investigation. However, whereas research with children under two years of age has on the whole used the longitudinal approach, research on older children has used the cross-sectional approach.

What has been missing, therefore, are those data which would give us a comprehensive account of the complete language system during a very important phase of development when the language is being acquired. This is precisely the gap that this book intends to fill. Its author has collected samples of conversation from one child (Sophie) between the ages of two and a half years and four years, the major part of the book being taken up with the presentation and analysis of transcripts at three different ages: 2;4, 3;0 and 3;5. An additional unanalysed commentary at 3;11 is included as an appendix.

Fletcher begins with a chapter identifying a number of critical methodological problems for the researcher in the field of child language. This outline, which touches on such issues as sample size, the role of the observer and the nature of the transcription, will provide a useful synthesis for students in the field. However, despite references to extracts from Sophie's data to help elucidate his discussion of these issues, the reasoning behind some of Fletcher's own methodological decisions are somewhat opaque. Indeed, it is difficult to discern what determined Fletcher's choice of the particular transcripts presented, what the twicely weekly samples collected between the major transcripts consisted of, why he decided against video analysis, and more problematically, how the analysis of context of utterance was made. For example, Fletcher presents a table noting the instances of temporal reference of past referring verb forms. In only two of the 22 examples, however, is he unable to locate the reference to some specified time in the past. This is an impressive use of contextual information. Unfortunately, there is no discussion of how the criteria were employed in this case.

Chapter two focuses on the ways in which Fletcher has chosen to analyse his data. Such a wealth of data clearly requires selective analysis, and Fletcher has opted for one that focuses on pronunciation, personal pronouns and deictic (expressions of demonstration). He might equally well have focused on a lexical or semantic analysis, but these issues remain to be tackled elsewhere. Here, however, analysis of verb structures is particularly useful, given the general sparsity of research on the development of the verb system. To my knowledge, there is no other comparable source of this data. However, although there are summaries and commentaries on specific aspects of language development, the



"Don't cry if it does smart a moment, the 'pain-killer' will soon take all the soreness away", an 1845 advertisement for a patent pain remedy illustrated in Martin S. Pernick's *A Calculus of Suffering: pain, professionalism, and anesthesia in nineteenth-century America* (Columbia University Press, \$45.50).

individual differences in reading speed and comprehension. I may have failed to grasp this theory, but it seemed rather empty. Perfetti proposes the concept of "text work", which consists of four different subprocesses which go on during text comprehension: lexical access; assembly of propositions; integration of propositions; and text modelling. "Individual differences are matters of efficiencies for these subprocesses", but "we can offer no serious estimation of these parameters in any given situation".

Similarly, the chapter on developmental dyslexia, although it describes a great deal of work comparing good readers to dyslexics, lacks bite. Abilities compared include letter naming, non-word reading, memory span, syntactic processing and speech perception. Dyslexics are worse at all of these. In the same way, the chapter on high-ability versus low-ability readers reports that the low-ability readers are worse at everything: sentence comprehension, lexical access, semantic encoding, visual search, non-word reading. But as this kind of research is applied by its adherence to investigating groups rather than individuals, one

book does not succeed in presenting an integrated framework in which these can be interpreted. Alfred North Whitehead identifies three necessary stages in the development of a scientific hypothesis: romance, precision and generalization. Fletcher's work is most accurately placed in the first stage; he presents facts and speculates on unexplored relationships. Again, although he presents his data in the light of current research, there is little discussion of possible mechanisms of developmental change, and certainly no overall theoretical framework. Fletcher states that "it is impossible... to account in general for the changes in linguistic performance". But given his initial discussion of possible explanations of linguistic development, some synthesis and healthy speculation is warranted. Instead, it seems as if the final chapter is missing.

Fletcher's book has two distinct uses. First, the chapters on method and explanation and on data analysis represent useful summaries of the central problems for students studying the complex field of language acquisition. Second, the transcripts and commentaries provide data for other researchers, who by turns contradict (for example, the discussion of stative and dynamic verbs), confirm (for example, the discussion of tense and aspect) and questions (for example, the discussion of this/that) current research in the area. Despite its shortcomings, however, the book will undoubtedly be a useful reference source for researchers and should stimulate further studies.

Julie Dockrell

Julie Dockrell is a psychologist at the Nuffield Hearing and Speech Centre at the Royal National Throat, Nose and Ear Hospital, London.

BOOKS

PSYCHOLOGY

Personal constructs

Self-Organized Learning:
foundations of a conversational
science for psychology
by Laurie F. Thomas and
E. Sheila Harri-Augstein
Routledge & Kegan Paul, £25.00
ISBN 0 7100 9990 8

Since its introduction in 1955, George Kelly's personal construct theory (PCT) has found wide acceptance among cognitive psychologists: unlike behaviouristic paradigms, it sees the individual's psychological life as primarily his own creation and not as a set of processes conditioned by external influences. PCT argues that man has the ability to observe and reflect upon experience, forming "personal constructs" or units of meaning which contain all the ideas, feelings, memories, evaluations, and so on, that he has about the events and people in his life. Personal constructs allow us to make sense of and manipulate the world, and it is personal constructs that prompt behaviour rather than mechanistic notions such as environmental stimuli and reinforcements.

Not content with just theorizing, Kelly went further and devised a

How are things at home?

The Child in Context: family-systems
theory in educational psychology
by Jean Campion
Methuen, £11.00 and £4.95
ISBN 0 416 39090 0 and 39100 1

Educational psychologists acknowledge the influence of parental attitudes and practices on child development, and have pioneered imaginative parent involvement schemes. In general, however, they are much more concerned with school processes than with family dynamics and are often uncertain about their precise role in relation to parents. With the rapid development of relatively autonomous local education authority school psychological services since the 1960s, they have increasingly seen the learning and behaviour problems of children and adolescents as related to the ethos, curriculum and organization of schools and to the ways in which individual teachers carry out their functions.

Moving away from the emphasis on individual case-work and the mother-child relationship which characterized much earlier child guidance practice, a number of psychologists have begun to concentrate on the application of systems theory to their work in schools. Essentially, this approach involves the psychologist in looking at the school as an institution, recognizing how the organization of the school affects its pupils, and trying to bring about desirable institutional changes. Even if not all educational psychologists have espoused the systems approach, most of them now spend a great deal of their time in school, which they regard as their working base.

In this timely book, Jean Campion, while being aware of the need to take into account the child's total experience, emphasizes that educational psychologists should understand families as well as school systems. In her view, there is always the possibility of a relationship between a child's difficulties, including those at school, and problems within the family, although the warm atmosphere of the family system or that parents who want to help are necessarily able to do so. Campion is anxious that educational psychologists should develop competence in relating effectively to families and devote much of her book to discussing relevant skills.

Campion is primarily concerned with the not inconsiderable number of

"repertory grid technique" (RGT) for actually eliciting an individual's personal constructs and thus for forming a picture of how he views and relates to the various elements in his life, from key concepts like "myself" to trivial ones like "dishwashing" or "goldfish". Taken together, PCT and RGT prompt the authors of *Self-Organized Learning* to suggest that Kelly's work may one day be seen as marking "a watershed in social science comparable to Copernicus and the telescope in natural science".

The implication here is that Kelly allows us to explore the inner space of the mind in the way that the telescope allows us to explore the heavens - a bold notion with far-reaching implications, particularly as Taylor and Harri-Augstein clearly feel that exploration by RGT undermines "the illusion that there is in any one person a finite, fixed and static mind". The mind is a dynamic, ever-changing flux, with unknown potential, and it is indeed the myth of a static mind that is the "fundamental flaw in any approach to learning", and which underpins misguided fixed measures such as those of intelligence, aptitude, and personality. This immediately calls into question the work not only of the behaviourists but of the psychometricians and the trait-theorists. Moreover, that work is seen to be actually counter-productive, prompting us to mistake "ineffective stabilized states in individuals and groups for permanent features", and by our mistake actually to help perpetuate this particular myth. Learning failure, low intelligence, personality problems are therefore seen as the creation of the psychologists who purport to "measure" these states, beguiling us all into thinking we see mountains when we are looking at clouds.

But where Taylor and Harri-Augstein break particularly new ground is in the way they have enlisted the use of the computer to help individuals construct their own grids, and to use the experience to assist what the authors call "self-organized learning". Out goes the notion of an instructor-based learning act, and in comes that of an act largely initiated by the learner himself, and one which allows him to explore and extend his own understanding, probing for himself something of the extent of his own potential, holding in effect a learning "conversation" with himself which parallels and goes way beyond that of instructor and student. In the process, the individual's personal constructs are creatively transformed, a process which can be extended to include conversations through the computer between dyads such as father and son or between manager and worker, in which each explores his own and the other's constructs about their relationship and the way they see self and other.

This book carries a bold challenge to psychologists. Some will love it, others will find its claims for RGT too bold, others will be outraged by it. Most definitely, it should not be ignored.

David Fontana
David Fontana is senior lecturer in educational psychology at University College, Cardiff.

So much for the theory, now what of the evidence? Those expecting to find the authors presenting the details of a scientific "experiment" to compare Kelly's model of man with those of the behaviourists and the psychometricians will be disappointed. The "mind" hardly admits of that kind of approach. Instead, we are given perhaps the most exhaustive survey yet of RGT, with detailed instructions on how to construct appropriate grids and deliberate on the information they elicit. These guidelines are supported by extensive examples of grids compiled by the authors in the course of their research at the Centre for the Study of Human Learning at Brunel University, research which has explored over 200 areas of human response to experience, ranging from concepts in physics to man management and yoga. It is as if the authors are saying: if you want to evaluate RGT and the models of mind it supports, you must try it for yourself and draw your own conclusions. To help us further, the authors also provide extensive activities of a grid-based nature which the reader can try on himself and see what he discovers about his own mind.

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